BOMBAY—1928-29

A Review
of the
Administration of the Presidency

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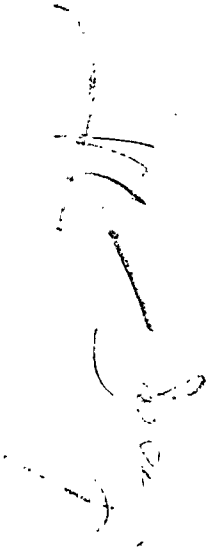
INTRODUCTION

THE Administration Report for 1928-29 is on the same lines as last year. It is divided into two parts :

Part I is a general summary of the year's work.

Part II deals with the work and events of the year under review and is preceded, where necessary, by a note explaining the history and functions of the department of Government whose work is reviewed and its place in the administration.

Photographs and diagrams have been inserted in the report as usual.



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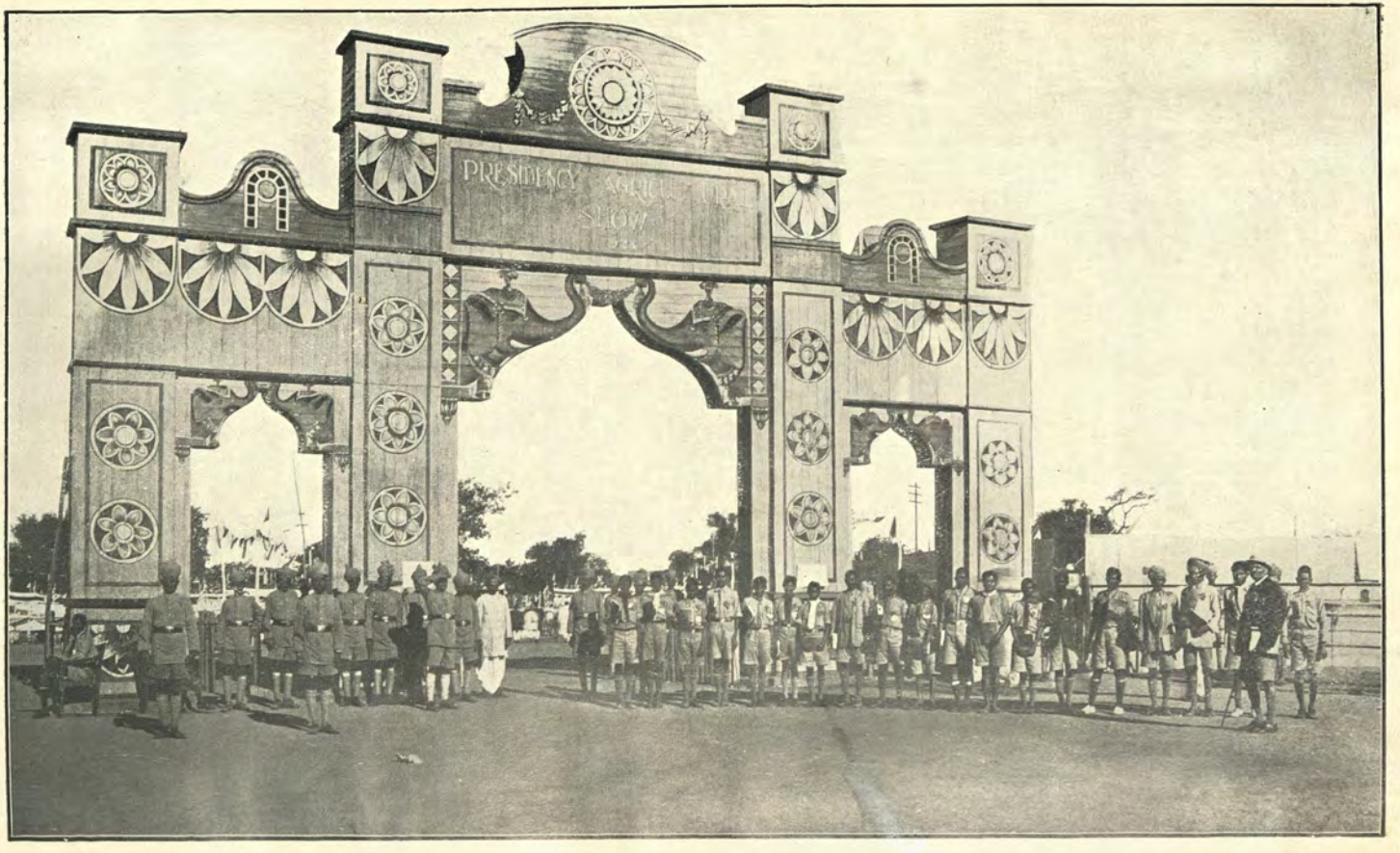


Presidency Agricultural Show, Ahmedabad, 1928—Main entrance. [*Frontispiece*

BOMBAY—1928-29

PART I

GENERAL SUMMARY

IT was stated at the conclusion of last year's summary of political events that the agitation in the Bardoli Taluka of the Surat District against the enhancement of the Land Revenue assessment had culminated in the appointment of a Committee of Enquiry to decide whether or not the assessment was a proper assessment based upon sufficient data, and that the Committee was still sitting. The Report of this Committee which was composed of R. S. Broomfield, Esquire, I.C.S., and R. M. Maxwell, Esquire, I.C.S., was published during the year under review. This important document contained a detailed examination of the settlement itself and of the claims made by the agriculturists for its revision. The Committee found that the increases which had been made by the settlement were not justified by the circumstances of the Taluka and the assessment was accordingly revised on the basis of an increase of about 5 per cent. in the existing assessment. Government accepted the conclusions arrived at by the Committee and, while the Report had definitely rejected the principles which the representatives of the agriculturists had put forward as the only method whereby the land revenue assessment could be settled, the report was accepted by them and the agitation ceased.

One of the most important political events of the year was the setting up of a Committee, presided over by Pandit Motilal Nehru, to draft a constitution for India. The Committee was constituted as a result of a meeting of the All Parties Conference held in Bombay in May. The results of the Nehru Committee were published early in September for the Committee had found itself able to draft a complete constitution for India in the intervening three months. The principal criticism of the

constitution came from the Muhammadans, who protested that it provided insufficient safeguards for their interests. The Nehru Report accepted the principle of Dominion Status, which was not welcomed by the Extremists, and in October an "Independence for India League" was started in Bombay City. Similar Leagues were formed in other places in the Presidency.

The intensive campaign of boycott against the Simon Commission culminated in an attempt to defeat the Government motion brought forward in the July 1928 session of the Legislative Council to appoint a Committee of seven members of the Council to co-operate with the Commission. The debate lasted for two days. The motion was finally carried by 64 votes to 40 and a committee consisting of three Muhammadans, three Hindus and one European was appointed.

While the Presidency was definitely divided on political matters, every section of the community was united in its anxiety over the serious illness of His Majesty the King Emperor and prayers for His Majesty's speedy recovery were offered in churches, mosques and temples throughout the Presidency.

A splendid welcome was given to His Excellency Sir Frederick Sykes and Lady Sykes on their arrival in Bombay in December and His Excellency's speech in reply to the address of the Bombay Municipal Corporation created a very favourable impression. The departure of Sir Leslie and Lady Wilson was the occasion of a warm demonstration illustrating the esteem in which both of them were held.

The communal disturbances from which the Presidency had, up to the previous year, been singularly free, were unfortunately once again an unpleasant feature of the history of the year. In June 1928 there was a fracas in Bombay City between Muhammadans and Hindus which threatened the hitherto friendly relations between the two communities, but the Commissioner of Police with the assistance of leading men in both communities was able to prevent any development of the dispute. In September there was a serious conflict between Muhammadans and Hindus at Godhra in the Panch Mahals District and in the same month two Hindus and four Muhammadans were killed and 38 Hindus and 55 Muhammadans injured as the result

of a riot at Surat. There was also a slight disturbance at Nasik which showed that even the Deccan was not free from communal tension. These disturbances were followed by a good deal of communal bitterness in which it is to be regretted that the Press played an unfortunate part. The most serious communal disturbances, however, took place in Bombay City towards the end of the year under report. They had their origin in a scare which originated about the 2nd of February 1929 that Pathans were kidnapping children in Bombay City to sacrifice in the foundations of a bridge said to be under construction in Baroda. The rumour was, of course, entirely baseless and Government issued a Press Communique denying the truth of the rumours and distributed it broadcast in the City. Unfortunately, this had little effect and the disturbances spread with alarming rapidity. The millhands in the northern part of the City were incited against the Pathans because it was alleged that the latter had broken a strike in the oil installations, and up to the 5th February 1929 the Pathans were the special object of attack. The latter, with the assistance of their co-religionists, began to retaliate and the disturbances spread to the centre of the City and became definitely communal. Troops were called out and the Auxiliary Force embodied and further Police requisitioned from the districts. There was little rioting in the ordinary sense of the term. The disturbances took the form of isolated assaults and murders by members of one community on the other, although the troops and police were compelled to open fire on several occasions. It was not until the 13th of the month that the excitement died down but the troops could not be withdrawn until the 27th. The death-roll of this deplorable outburst amounted to 149, of whom 92 were Hindus, 26 Pathans, 29 other Muhammadans, one a Parsi and one a European Deputy Inspector of Police. Seven hundred and forty-three injured persons were treated in the hospitals. Eleven of the deaths and 29 cases of wounding were caused by gunshot wounds or bayonet charges by the military and the police. As the result of a motion in the Legislative Council, Government appointed a Committee of Enquiry to investigate the causes and origin of the disturbances, the course which they took and the measures

adopted by Government to suppress them. The Committee was appointed in April 1929 and its report was published later in the year. In March there was a Hindu-Muhammadan fracas in Sholapur, where extra police had had to be posted owing to the strained relations between the communities.

There was considerable industrial unrest during the year under report. On the 16th April 1928 several thousand men in the Currimbhoy group of mills struck work and by the 26th the strike had become general. Despite efforts by the Millowners to re-open their mills, the strike lasted until the 4th October when, as a result of a conference convened by the Honourable Sir Ghulam Husein Hidayatullah, the General Member, an agreement was arrived at for the calling off of the strike and for the appointment of a Committee to consider the grievances of the men. It was presided over by Sir Charles Fawcett, I.C.S., a Judge of the High Court, and the other members were M. P. Khareghat, Esquire, I.C.S. (retired) and B. S. Kamat, Esquire. Its report was published in the middle of March 1929 and made a number of important recommendations, especially with regard to mediation and conciliation in the mill industry.

Finance.—The financial position of the Presidency which has been so unsatisfactory in recent years showed no signs of any improvement and the estimates of revenue for the coming year presented in February 1929 were actually somewhat less than those of the year under review. The position was summarised by His Excellency the Governor in his speech opening the Budget session, when he said :—

" With our working balances now at the minimum necessary for efficient administration, there has been no alternative left to us but to confine our activities for the most part to carrying on, and it has not been possible to gratify, to any extent, the natural anxiety of those members of my Government who are in charge of what have come to be known as the Nation Building Departments to extend their activities. It is also unfortunately true that the slump in land values in the City has postponed indefinitely the expectation of large capital receipts from newly developed lands ; and the burden which has been cast upon our

revenues has prevented us from reaping the full benefit of the remission of the Provincial Contribution."

It was at one time expected that the receipts from Land Revenue would exceed the Budget Estimates by over 12 lakhs, but the severe frost in parts of Gujarat and Sind had an unfortunate effect on Land Revenue receipts, which actually showed a decrease over those of 1927 and 1928. Owing to lack of funds, a further expansion under the Primary Education Act has been found impossible.

In presenting the Budget to the Legislative Council in February 1929 the Finance Member said that the final accounts for the year 1927-28 showed a closing balance larger by Rs. 55 lakhs than was anticipated at the time of the last Budget discussion. This was accounted for by a net decrease in expenditure debitable to revenue of Rs. 7 lakhs below the actual revenues of the year and of a saving of Rs. 48 lakhs in the capital accounts owing to the loans which were voted by the Council in that year for Flood Relief not being fully distributed before the end of the year. In the current year (1928-29) the estimates showed a net increase of revenue of Rs. 6 lakhs and a net decrease of expenditure of Rs. 12 lakhs, a total improvement of Rs. 18 lakhs. But what the improvement would actually amount to depended on the extent of the damage to crops done by the recent frost.

Turning to the various items of Revenue and Expenditure, Land Revenue amounted to Rs. 484½ lakhs. The next important head of revenue, Excise, showed a fall of Rs. 4 lakhs over the previous year and Rs. 17¼ lakhs as compared with 1926-27. Stamps realised Rs. 168½ lakhs, a reduction of Rs. 7 lakhs over the previous year. There were no receipts from Income-tax, as the assessed income of the Presidency did not exceed the datum line which had been fixed in 1920-21, a boom year.

Expenditure on Education amounted to Rs. 198 lakhs, on Police to nearly Rs. 170 lakhs and on General Administration to Rs. 223 lakhs. During the year Rs. 417·34 lakhs were borrowed from the Government of India of which amount Rs. 271·87 lakhs were for the Lloyd Barrage and Canals in Sind.

Trade and Commerce.—In the report for 1927-28 it was remarked that the trade of Bombay, after a period of lean years, had turned the corner. There followed a most disastrous period for the industry and commerce of the City. From March to October 1928, there was a general strike of cotton mill operatives resulting in an enormous economic loss to the industry and in serious reactions on other business. The oil companies were also involved in prolonged labour troubles and the outbreak of communal riots in February 1929 bade fair to paralyse the economic and social life of Bombay. In the face of these facts, the trade figures of the present year appear almost paradoxical, marking as they do a further step, *albeit* a small one, towards trade recovery. The explanation of the paradox is found in the importance of its hinterland to the port and it may be concluded that with happier times in Bombay itself, the year would have shown a welcome revival of trade.

Imports of private merchandise declined in value from Rs. 86·39 crores to Rs. 84·14 crores, due almost entirely to a reduction in imports of raw cotton. The imports of bullion further declined by Rs. 3·32 crores. The total trade in merchandise expanded by Rs. 14·3 crores, or 9 per cent.

Exports of Indian produce expanded by the substantial figure of Rs. 18·46 crores, or 30 per cent. This increase is due almost entirely to an increase in the export of raw cotton which, as foreshadowed in last year's report, advanced by Rs. 16½ crores. The greater part of this increase went to Japan which increased her takings by 73,000 tons thus almost recouping the reduction of 1927-28. China also was an important consumer and increased her takings by no less than 44,000 tons. Shipments of seeds also improved by the useful margin of Rs. 1·64 crore which marks an advance of nearly Rs. 6 crores on the figures for 1926-27. A result of the enforced idleness of the mills was a further decline in exports of cotton manufactures by over Rs. 79 lakhs making a total fall of Rs. 1½ crore from the figures of 1926-27. A further result of the strike of 1928 is that it is still impossible to arrive at any evaluation of the effects of the measures to aid the industry adopted by

the Government of India in October 1927 as a result of the Tariff Board's report.

Despite the marked recovery noticed in the preceding year, the total value of foreign merchandise re-exported declined by Rs. 1·91 crore to Rs. 5·02 crores, as a result of smaller re-shipments of raw hides and skins, cotton manufactures, raw cotton and sugar.

The percentage distribution of India's trade among the various countries returned to normal. As a result of Japan's resumption of the import of Indian cotton, the United Kingdom's percentage receded from 28·12 to 25·68 which, however, is an advance of ½ on the percentage for 1926-27. Japan's percentage rose by a corresponding margin to 19·67. Trade with the Continent of Europe further improved from 26·27 per cent. to 27·67 per cent. America's share dropped from 7·17 per cent. to 5·16 per cent. owing largely to reduced imports of cotton from that country.

Excluding the abnormal increase in the export of raw cotton, the value of the total foreign trade of Bombay declined by about Rs. 5½ crores. The increase in the export of seeds was offset by a somewhat larger decrease in the re-export of foreign merchandise and the other contributing factors were a decline of Rs. 2¼ crores in the imports of merchandise and of Rs. 3¼ crores in imports of precious metals. The former decrease was partially accounted for by a general reduction in prices but the decrease in takings of gold and silver was not compensated by a corresponding increase in takings of merchandise and was probably attributable to the diversion of South African consignments from Bombay to Madras by reason of freight advantages.

There was a decided falling off in the coastal trade of the Presidency, which receded by over Rs. 7 crores. This reduction was largely due to decreased shipments of cotton piece-goods, raw cotton and cotton twist and yarn, as a result of the prolonged mill strike.

The gross collections of the Bombay Custom House advanced from Rs. 1,249 lakhs to Rs. 1,258 lakhs. These figures exclude the collections on account of the various cesses such as cotton

cess and tea cess. The ratio of true expenditure to revenue was 1·27 per cent. as against 1·24 per cent. in the previous year.

The aggregate value of the entire maritime trade of Sind was valued at Rs. 77·89 crores as against Rs. 76·48 crores in the preceding year, giving an increase of Rs. 141 lakhs or nearly 2 per cent. The foreign trade was 82 per cent. of the total or Rs. 63·50 crores and the coasting trade 18 per cent. or Rs. 14·39 crores. Out of the aggregate value of the foreign trade, exports amounted to Rs. 29·24 crores showing a rise of 2 per cent. on the figures of 1927-28. The value of the import trade also showed an increase from Rs. 30·54 crores to Rs. 34·25 crores or of 12 per cent.

Agriculture.—The agricultural season of 1928-29 opened auspiciously, and there were excellent rains in July and August throughout the Presidency except in the East Deccan and East Karnatak. These tracts, however, received good rains in September and October, with the result that the kharif season was one of the best for the last ten years. In Sind the inundation of the river Indus was satisfactory in June and July, but the river failed in August, and the season did not prove so satisfactory as at one time seemed likely. Nevertheless, the results of the kharif season and the prospects of the rabi season were good. Unfortunately, a frost swept over Sind and the northern part of the Presidency proper at the end of January and the beginning of February 1929. This caused considerable damage, chiefly to fruit trees in Sind, to rabi crops in general and cotton and early sown wheat in particular in Gujarat, and to sugarcane on the Pravara and Godavari Canals in the Deccan. A large portion of the grape crop in the Nasik District and of fruits and vegetables in the north Deccan was also lost as a result of the frost.

In the Presidency excluding Sind the gross cropped area decreased by 48,000 acres, while in Sind the decline was 99,000 acres. The actual gross cropped areas was 28,958,000 acres in the Presidency excluding Sind and 4,483,000 acres in Sind. The total cultivated area in the whole of the Presidency was about 43,000,000 acres. The total uncultivated area in the Presidency excluding Sind was 15,196,000 acres but of

this only 862,000 acres are available for cultivation. In Sind the total uncultivated area amounts to 20,773,000 acres out of a total area of 30,175,000 acres, of which 5,957,000 acres are available for cultivation. The area under food crops decreased by 2·8 per cent. below the previous year, but the area under non-food crops increased by 5·6 per cent. The most noticeable increase was under groundnuts and cotton. The net result of these variations in the food and non-food crops was a decrease of 0·2 per cent. below the total cropped area of the previous year, although there was still a rise of 7·9 per cent. as compared with the average.

Department of Agriculture.—The Agricultural Department continued its normal work of research and propaganda. The second Presidency Agricultural Show was held at Ahmedabad in November 1928 and was regarded as quite the equal of the first Presidency Show held in Poona in 1926, several pavilions showing a marked advance. Several excellent District Shows were also held during the year, the most important being those at Bijapur, Ahmednagar, Jalgaon and Jacobabad. In addition, a large number of demonstrations were conducted throughout the Presidency by the Department, while practical demonstrations were organised in Sind on an extensive scale. The Department of Agriculture undertakes large seed-supply operations, chiefly in connection with the cotton crop, and the area sown with seed supplied by the Department is increasing every year. Striking results have been obtained from merely grading rabi jowar seed in the Deccan, and a great deal of work was done this year with the object of helping cultivators to adopt this simple but valuable improvement. The services of the "bunding" officers who teach cultivators the right methods of aligning and constructing field embankments were in great demand. The Department also paid special attention to the diversification of crops in the Deccan canal zone which in the past has depended too much on sugarcane. The two most promising money crops are early cotton and early groundnuts. Experiments were also made in the direction of reducing the high cost of production of sugarcane. Considerable success has attended the introduction and dissemination of Akola

Bajri and the importance of this variety is now fully realised. The Department also demonstrated various methods of crop protection, while cattle improvement was conducted by the cattle breeding farms and the putting out of pedigree bulls. The Agricultural Engineer's Department has designed many improvements in agricultural implements of a nature making them accessible to the ordinary cultivator. The increasing use of machinery in agricultural work is illustrated by the fact that the Oil Engine Class was very popular and there is now a demand from the trade that the Department should organise tractor classes to train drivers as the driver problem is one of the main obstacles in the way of introducing tractor cultivation.

The Poona Agricultural College was as popular as ever and a number of applicants for admission had to be disappointed owing to lack of accommodation. Students from the landed aristocracy and sons of large landowners now form a definite and growing group in the College. The work of the six Agricultural Schools continued.

Instruction.—Financial considerations have hampered the expansion of education in the Presidency but during the year under review the total number of recognised and unrecognised educational institutions increased by 329 to 17,042 and the number of pupils by 38,687 to 1,230,840. Out of a total of 26,831 towns and villages, 10,579 possessed schools, the average area served by each town or village with a school being 11·7 square miles. The percentage of both male and female scholars under instruction to the total population showed a slight increase, 9·69 as against 9·43 in the case of males and 2·71 as against 2·58 in the case of females.

The total expenditure on Public Instruction rose by over Rs. 6 lakhs to Rs. 396 lakhs, of which nearly 50 per cent. was met from Government funds, the remainder being made up by 18 per cent. from Local Board funds, the same percentage from fees and 14 per cent. from other sources. Primary schools absorbed over Rs. 198 lakhs, exclusive of expenditure on inspection, construction and repairs.

The number of primary schools was nearly 13,000 and the number of pupils over 900,000, both showing small increases

over the previous year. The number of girls under instruction in primary schools was over 220,000. In this connection the Government Resolution on the Quinquennial Report of the Director of Public Instruction for 1922-27 remarks that although there has undoubtedly been a considerable awakening the advance in the education of girls as evidenced by numerical results is very slow. The majority of the girls attending the primary schools do not get beyond the infant classes and only 3·1 per cent. of the total number of girls attending recognised educational institutions have advanced beyond the 4th Vernacular Standard, the passing of which is generally regarded as the test of literacy. It is pointed out that it is for the social reformers to endeavour to create a change of outlook among the various communities. The same Resolution said that it must be regretfully recognised that the Muhammadan community, which once shared with the Brahmins the distinction of being leaders of literacy and culture in Western India, had failed to maintain their ancient position. The statistics furnished in the report showed that the literacy figure for Muhammadans in the Presidency excluding Sind was 10·2 as against 16·8 for the advanced classes of Hindus. But the net position was still more unsatisfactory when Sind was taken into account, where the literacy figure for Muhammadans was 2·4 as against 12·4 for advanced Hindus. Nor could it be denied that a large number of Muslim boys left school with only a smattering of reading and writing and soon lapsed into illiteracy. It is, however, satisfactory, says the Resolution, to find that the results of the efforts of Government to foster education among the Intermediate and Backward Hindu communities has resulted in marked progress, especially in the Deccan and Karnatak districts.

Law and Justice.—Eleven Acts were passed by the Legislative Council during the period under review and, having received the assent of their Excellencies the Governor and the Governor General, became law.

Act No. IV of 1928 (An Act to amend the law relating to the University of Bombay) was passed in response to a general feeling among the educated classes of the Presidency that the

constitution of the University required amendment so as to enable the needs of learning and higher education to be met more adequately than was possible under the old system, especially in the direction of post-graduate teaching and research.

Another important Act was Act No. IX of 1928 (An Act further to amend the City of Bombay Municipal Act, 1888) which had for its object the giving of adequate representation to labour on the Bombay Municipal Corporation.

Ten Government Bills were introduced into the Legislative Council during the period under review, of which six were passed into law. There were also 25 private Bills introduced but none reached the stage of becoming law. Six resolutions were moved during the year of which three were carried and three were withdrawn.

Litigation in the Presidency shows no signs of decreasing. While the High Court had slightly fewer cases for disposal on the Original Side, the Appellate work was definitely higher. The number of suits instituted in the Civil Courts in the mofussil was nearly 156,000, an increase of more than 12,000 over the figures of the previous year. In East Khandesh the number of suits instituted was 19,000; Poona, West Khandesh, Nasik, Kaira and Ahmedabad, all had over 10,000 cases. In the High Court there were 5,636 cases for disposal against 5,860 in the preceding year, of which 2,745 were instituted during the year. Less than half of the suits for disposal were decided. On the Appellate Side 1,560 appeals were disposed of, leaving a balance of 2,572 pending at the close of the year. The Bombay Small Cause Courts disposed of over 34,000 cases.

There was a slight decrease in the number of criminal cases for disposal. The figure of 212,000 offences was reported, showing a decrease of 1,440 over the figure of 1927. Nearly 200,000 were brought to trial and of these 117,000 persons came before the Presidency Magistrates, of whom 100,000 were convicted. In over 84,000 cases the offenders were let off with a fine, and imprisonment exceeding six months was only inflicted in 383 cases. The fines imposed aggregated to Rs. 4·22 lakhs. The Courts of Session tried the cases of 1,712 persons, of whom 52·6 per cent. were convicted, the death sentence being imposed

in 25 cases and transportation or penal servitude in 131 cases. The High Court Session tried 126 cases.

In Sind there was a slight increase both in civil and criminal work.

Police and Crime.—The most important feature of the year was the fall in the figure of reported cognisable crime and, more particularly, of serious crime. The figure of cases reported to the police was 27,500 compared with 29,200 for the previous year and was the lowest for the past five years. The districts chiefly responsible for the decrease were Poona and Dharwar. In the former case the cause was attributed to the running down of a number of gangs and to good patrolling in Poona City. In the latter case it was attributed chiefly to a more exact registration of crime. In Satara District there was a further fall in serious crime, which is now half of what it was 8 or 9 years ago. The Bombay Suburban District was again the most criminal district in the Presidency and showed a further increase in reported crime by 114 cases. The marked improvement in respect of cognisable crime was, to some extent, counterbalanced by a substantial and continued rise in non-cognisable crime. There was an increase in the number of maliciously false cases but there was a parallel increase in the number of prosecutions ordered and a satisfactory increase in the percentage of convictions. The number of undetected cases also showed a satisfactory decrease.

From the Police point of view the continued rise in non-cognisable crime is a disturbing factor in that it brings with it an increase of duty in the service of summonses ; and when, as was again the case in the year under report, the Police had to be kept below the strength to effect the necessary savings in the budget, the yearly increase of work of this character must be regarded with disquietude. The Bardoli agitation in the Surat District imposed upon the Police unwonted duties, which they carried out with tact and patience ; and in the opinion of the Inspector General of Police their services during this critical time are worthy of warm commendation. The number of cases reported under the more important heads of crime were : murders 348 ; attempts at murder and culpable homicides 151 ;

dacoities 150; robberies 430; and house-breaking 5,141. The number of thefts was over 8,000. Taking the Presidency excluding Sind, the incidence for serious crime has fallen from 1·06 to 0·99 per thousand of the population. The value of property stolen during the year in connection with cognisable cases was Rs. 10·46 lakhs against Rs. 10·20 lakhs, while the value of property recovered was Rs. 2·85 lakhs as compared with Rs. 3·12 lakhs.

One of the duties which imposes an increasingly heavy burden on the Police is that of the licensing and control of public motor conveyances. Public motor traffic is now established on all the main routes of the Presidency and the number of public motor vehicles licensed during the year was 4,742. The Inspector General of Police says that more road patrols properly equipped to supervise and control motor traffic are necessary.

The total strength of the Police was 710 officers and 17,357 men, and the total cost was just over Rs. 96 lakhs.

Bombay City Police.—The year was a very hard one for the Police in the Presidency town. There were strikes in several mills in the early months of the year and from the end of April until the 4th of October 1928 a general strike in the mill industry. On the 23rd April the Police had to open fire in the Kalachowki area and one man was killed and one wounded. After the general strike came to an end, there was a succession of lightning strikes, numbering in all 97, in different mills to the end of the year and on the 12th December 1928 during one of these strikes serious rioting took place on the Suparibagh Road, when 4 rioters were killed and 18 injured, and 30 policemen were also injured. The heavy strain caused by the industrial unrest told on the health of the Police and sickness increased.

There was a slight decrease in cognisable and non-cognisable cases, which numbered in all 136,000. The total of Indian Penal Code crime during the year was the lowest since 1911, while there was a reduction of 30 per cent. in crime compared with 6 years ago.

The total value of property alleged to have been stolen in police cognisable cases amounted to nearly Rs. 19 lakhs as compared with Rs. 10¾ lakhs in the previous year. The total

value of property recovered was Rs. 4·15 lakhs. Nothing was recovered in two important cases of criminal breach of trust, involving Rs. 6¼ lakhs, committed in one case by the managing director of a shipping company and in the other by the managing director of a bank.

The percentage of non-detected cases worked out at 3·96. The total number of cognisable cases was 114,267, of which the police cases numbered 93,638, the remainder being magisterial.

Public Health.—Following on 1927, the record year of low death-rate, the year under report showed in comparison a high mortality. The health history of the Presidency from 1918, the year of the influenza pandemic, judged by the total mortality figure, is one of steady progress up to 1922, the year of a record of low death-rate (23·61) and thereafter of gradual return to the low standard that normally prevailed. Thus the death-rate figure for 1923—25·89, for 1924—27·63, for 1925—23·66, for 1926—28·55, for 1927—25·71 and for the year under report 27·28 indicate a return to the 1911-15 mean of 27·56. The set-back is mainly due to four recurrent death factors, viz., Plague, Fevers, Respiratory Diseases and Other Causes. The further increase in births for the year suggests in itself improvement in conditions but it brought along with it an increase in infant deaths.

The increase appears in three separate major headings of causes of death. Thus comparing the figures with those of the preceding year, "Fevers" show an increase of 11 per cent., "Respiratory Diseases" 11 per cent., and "Other Causes" 9 per cent., while "Intestinal Diseases" show a reduction of 9 per cent. and the chief epidemic diseases—cholera, small-pox, plague and influenza combined show a reduction of 37 per cent. For influenza alone of epidemic diseases, a low figure of deaths—228—was recorded, but there is reason to believe that it was more prevalent than in 1927, in a milder form generally, but with a virulence reminiscent of the pandemic of 1918 in two or three localised areas. That influenza persists is shown by deaths from respiratory diseases which is the only general disease heading that continues to compare unfavourably with its pre-pandemic average. Similarly, if fever mortality during the

year under report be compared with the figures for 1927 and also with the mean for previous five years, it would prove the same thing. With the exception of 1914, the year under report showed the highest number of births on record, the birth-rate being 38·17 against 36·85 during the previous year. This increase in birth-rate was general throughout India. In the Presidency the birth-rate for rural areas was 40·09 and for urban areas 30·29. The death-rates for rural and urban areas of the Presidency were 27·18 and 27·68 respectively. The highest death-rate was returned by Satara, mainly due to the prevalence of plague and cholera, while in the Districts of Ahmednagar, Sholapur, East and West Khandesh the high death-rate may be attributed to cholera.

Infant mortality showed an increase, the ratio of deaths being 180·30 per thousand of registered births, as against 161·42 in the previous year, the mortality being the highest in the first month of life and the urban death-rate being considerably higher than the rural. In Bombay City the number of deaths was less than the annual average of the ten years 1918-1927. The salient features of infant mortality are the magnitude of the *role* played by debility and prematurity in the causation of death in the first four weeks of life and the large proportion of deaths from respiratory diseases during the remaining 11 months of infancy. Taking the principal epidemic diseases, there was an increase in mortality from plague as compared with the previous year. But the number of deaths recorded from cholera was much less than in the previous year and also for the five years' average. There was a slight rise in mortality from small-pox.

Salt.—The amount of salt issued for consumption in the Presidency excluding Sind during the year amounted to nearly four million maunds and the *per capita* consumption rose from 13·88 lbs. to 14·52 lbs. The production of salt at Kharaghoda was increased during the year as stocks were diminishing and amounted to 27·55 lakhs of maunds. The produce of the Sea Salt works was 109·77 lakhs of maunds as against 99·22 lakhs of maunds in the previous year. The manufacturing season closed with a balance of 53·78 lakhs of maunds of sea salt on

hand against 48·84 lakhs of maunds at the end of the previous season. Over 90,000 maunds of salt were used at the fish curing yards in Ratnagiri and Kanara an increase of over 11,000 maunds.

In Sind there was an increase both in the amount of salt produced and in the amount issued. Of the total quantity of salt produced locally and imported by private agency 516,920 maunds were consumed in Sind. The average consumption worked out at 12·97 lbs. per head per annum as against 12·39 lbs. in the previous year.

There was an increase of over Rs. 3 lakhs in the revenue of the Salt Department during the year, the gross receipts being Rs. 151 lakhs in the Presidency excluding Sind and Rs. 6·63 lakhs in Sind. The total expenditure amounted to Rs.30·68 lakhs and Rs. 1·34 lakhs respectively.

Excise.—The net excise revenue decreased by Rs. 5·66 lakhs to Rs. 307 lakhs. Opium produced a larger revenue, the gain on sale being Rs. 12·63 lakhs, an increase of Rs. 24,000 over the previous year. Auction fees amounted to Rs. 11·21 lakhs, an increase of Rs. 1·37 lakhs over the previous year, but the consumption of opium fell by 1,026 seers, amounting to 22,126 seers.

As regards country spirit, the revenue position was not satisfactory. There was a decrease of Rs. 8·12 lakhs in still head duty and a decrease of Rs. 2·10 lakhs in vend fees. Added to this fall in revenue, there was an increase in crime in general, and especially in cases relating to illicit distillation, illicit importation and unlicensed sale. Illicit liquor, says the Commissioner, is being consumed in large quantities all over the Presidency and the record of cases would have been much higher if there had been a more adequate staff to cope with the evil. Several serious assaults were committed on excise raiding parties and in some districts popular opposition to the detection of illicit stills was so great that excise officers hesitated to act on information until they could collect a large party of excise and police peons, which entails loss of time and failure or abandonment of raids.

Although further rationing throughout the Presidency was suspended, consumption was nearly five lakhs of gallons below

the allotted ration and the problem before the Department, in the view of the Commissioner, is how to use this quota in order to replace illicit consumption. Higher prices prevailed in almost every district and these must be brought under control as a first step towards the suppression of illicit distillation. Steps have been taken to make country liquor more palatable so as to compete with illicit liquor, but so long as it is offered to the public at such a prohibitive price illicit distillation will continue to increase thereby inflicting a considerable loss on Government revenue without helping the cause of temperance.

Toddy revenue receipts decreased by Rs. 1,89,000 and so did intoxicating drugs to the extent of Rs. 1,22,000.

In Sind the consumption of country spirit rose from 114,000 to 119,000 proof gallons, while there was an increase of 61,000 gallons in the imports by sea of fermented liquors, liqueurs and spirits, but a decrease of 2,000 gallons in wines. There appears to be a larger demand for the cheaper and lighter continental beer and consequent decline in imported spirits. The net revenue amounted to Rs. 41 lakhs, an increase of Rs. 62,000.

Forests.—The financial results of the year under review compared favourably with those of the previous year, this being due in the main to improved conditions in the timber market in the Northern and Southern Circles. Progress was made with works of development and improvement, but heavy expenditure is still necessary for completing the various road schemes needed to open up the Dangs and Peint with a view to facilitate the working of a fine timber-producing area as yet unworked.

The gross revenue of the year amounted to Rs. 73·77 lakhs, an increase of nearly a lakh over the previous year, but showed a slight fall as compared with the average of the preceding five years.

Construction was in progress on 241 miles of new roads and repairs were carried out on 1,238 miles of old roads, the total expenditure under this head being Rs. 2·45 lakhs.

Forest offences showed an increase of 1,120 which was attributed by the Chief Conservator of Forests to the suspension

of communal punishment. Out of the 21,124 offences reported, 16,485 cases were compounded and compensation amounting to Rs. 1·57 lakhs was recovered. There was an increase of 71 square miles in the area burnt during the year. That many of the fires were intentionally started, the chief object being to get an early supply of green grass, is evident from the fact that in Thana many had their origin in the interior of reserved forests.

During the year nearly 2½ million cattle were admitted to grazing in the forest lands, and the fees collected amounted to Rs. 5·37 lakhs, the actual value at full rates being Rs. 22 lakhs.

During the year timber to the extent of over 6½ million cubic feet and fuel to the extent of 49½ million cubic feet were produced by the forests.

Famine fodder operations were continued and the quantity of grass on hand at the three storage depots at the close of the year was 291 lakhs of lbs.

During the year Government sanctioned the formation of Forest Advisory Committees in certain districts of the Presidency, these bodies being composed of a limited number of Forest and Revenue officers and non-officials, with the Collector as the Chairman. The idea is to promote informal discussion of questions concerning the local administration of the Forest Department and for directing attention to and remedying any legitimate grievances or complaints of the public.

Co-operative Movement.—The policy of consolidation and weeding out of inefficient units in the movement was followed throughout the year. The number of agricultural societies showed an increase of 140 from 4,177 to 4,317 but the membership and the working capital showed a slight reduction of 924 members and Rs. 3·09 lakhs respectively. This was due to the fact that some bad societies with heavy membership had to be cancelled and the new societies which were added to the list had a small number of members per society. The working capital showed a slight reduction because finance was cautiously given both by the Provincial and District Central Co-operative Banks. As regards the reserve fund, however,

the position was very satisfactory, for it showed an increase of nearly Rs. 5¾ lakhs. Similarly members' deposits showed an increase of a little less than a lakh of rupees.

As regards individual districts, the number of agricultural societies in the Deccan remained practically the same as last year. The Belgaum and Satara Districts showed normal progress and in Gujerat new societies were registered principally in the Panch Mahals and Ahmedabad Districts. In both the Districts, West and East Khandesh, progress was steady and a number of societies were registered in Thana, particularly in the Bhiwandi and Wada Talukas. Sind showed satisfactory progress all round.

There is a welcome reduction, though small (3 per cent.), from 33 to 30 in the total percentage of overdues. The total amount of unauthorized arrears was Rs. 95¾ lakhs as compared with Rs. 105 lakhs last year. It is, however, interesting to note that out of 4,317 agricultural credit societies as many as 1,647 have no overdue arrears and there are 490 societies with arrears of less than 10 per cent.

This year again there was a slight decrease in the number of agricultural non-credit societies. During the year special attention was paid to the organisation of Purchase and Sale Unions with membership confined only to societies. There are four such Unions working at present in the Presidency, most of them in conjunction with the Bombay Provincial Bank. The policy of increasing the number of Supervising Unions is being continued and some of the Guaranteeing Unions, which were not doing good work, were either converted into Supervising Unions or were cancelled. The efficiency of the Supervising Unions as a whole increased considerably and the number of societies that are being affiliated to Unions is also increasing.

The Provincial Co-operative Bank continues to do excellent work. Three new branches were opened during the year, and the total number of branches is now 22. The opening of the branches means some additional expenditure to the Bank in the initial stages, but such expenditure is justified since it facilitates the development of the area, and brings

about an improvement in the working of the societies. The number of District Central Banks was 19, the same as last year. There are 70 full fledged Urban Banks with a working capital of more than Rs. 50,000.

Though the progress in the general development of the movement was not as rapid as in previous years, the working capital increased by nearly three-fourths of a crore and the amount of the additions to the Reserve Fund was substantially more than that recorded last year. The satisfactory figures of increase of the Reserve Fund from Rs. 70½ lakhs to Rs. 80½ lakhs clearly show that the movement is becoming more stable. As regards intensive co-operative education, three regular co-operative schools were opened by the Bombay Provincial Co-operative Institute on the 1st July 1928 at Surat, Poona and Dharwar. It is hoped that the schools will be of great value by providing continuous systematic training in place of the short courses which formerly were given.

Public Works.—The Lloyd Barrage and Canals Construction scheme in Sind passed through its fourth full working year during which further surveys, levelling, aligning and designing of major and minor subsidiary channels was done as well as the excavation of canals both by dragline machines and manual labour, construction of the Barrage itself and of groups of regulators, fall regulators, steel and masonry bridges, etc. The total length of main canals, branches, distributaries, etc., to be constructed is 6,211 miles of which 1,300 miles, comprising chiefly the largest sections, have been completed. The total amount of earthwork done on the whole project to the end of March 1929 was 247 crores cubic feet and the total amount that remains to be done is roughly 308 crores cubic feet according to the working estimates. The work done is equivalent to the excavation of a channel 234 miles long, 200 feet wide and 10 feet deep. Good progress was made with the construction of the foundations and piers of an additional 22 spans of the Barrage. As regards the existing open canals the inundation of 1928 was fairly favourable. The river did not rise much above the fair irrigating level but it kept steady at a little below that level for a long period and adequately met the general

requirements of irrigation. The rainfall during the season was scanty and was not of material benefit to the crops. Improvements to the Begari and Sukkur canals were carried out during the year. The old Kasimpur bund was reconditioned and extended. Projects for remodelling the Sind, Pinyari, Kalri and the Fuleli canals are under consideration.

In the Deccan the rainfall of the year was on the whole satisfactory. The construction of both the Pravara Right and Left Bank canals has been completed and the canals are in operation. The Lloyd Dam at Bhatgar is now completed in all respects. The work of remodelling the Nira Left Bank canal is in progress. As the supply in Lake Fife is insufficient to meet the increasing demand for water for Poona City and perennial crops on the Mutha canals, investigations are being made for increasing the capacity of the lake either by raising the present dam or by constructing subsidiary storage dams and for enlarging the Mutha Right Bank canal.

Bombay Development Department.—In accordance with the recommendation of the Advisory Committee, which was accepted by Government, the reclamation of block No. 2 was undertaken, during the year under report, by wet or pumped filling. Dredging commenced on 2nd November 1928 and stopped on the 28th March 1929.

The estimated output for the season was 1,000,000 cubic yards, but the actual quantity removed from Back Bay during the season was 1,084,588 cubic yards.

The " Kalu " gave very satisfactory results in this the last year of its working, the average output being 668 cubic yards per pumping hour. The unit cost, too, was low, being just under 11 annas per cubic yard.

The total quantity of dry filling brought in by contract during the year was 1,235,000 tons, at a cost of about Rs. 1-3-0 per ton or cubic yard. Out of the material brought 1,055,000 tons were deposited in block No. 8 while a small quantity, *viz.*, 180,000 tons, was put in blocks Nos. 2 and 7. At the end of the year the area of block No. 8 that remained to be filled in was about 50,000 square yards.

In addition to the dry filling brought in by train, about 111,000 cubic yards of dry filling, consisting of building rubbish, were deposited by motor lorries in blocks Nos. 1 and 2 at an average cost of about Re. 0-10-0 per cubic yard.

Industrial Housing Scheme.—The progress in opening new chawls during the last year was checked by the partial mill-strike in January 1928 and this was followed by a severe set-back due to the prolonged general mill-strike which lasted from April to October 1928 and to the generally disturbed industrial conditions thereafter. When the year closed the tenancies were nearly 900 less than on 31st March 1928. The numbers of occupied chawls at the beginning and at the end of the year under report were 123 and 124 and the number of occupied rooms 7,678 and 6,805 respectively. The scale of rents remained unchanged throughout the year.

Out of the two chawls converted into two and three-roomed tenements as an experimental measure—one at Naigaum and the other at DeLisle Road—the chawl at Naigaum continued to be fully let as in the previous year as two-roomed tenements with the odd rooms let singly, but the chawl at DeLisle Road remained mostly vacant.

Three chawls at Worli were placed at the disposal of the Police Department from 11th February to 23rd March 1929 for accommodating under-trial prisoners and suspicious characters arrested during the riots.

The assessment of occupied rooms for the year was Rs. 5,76,877 but the actual collections amounted to Rs. 4,47,915, *i.e.*, only 78 per cent. as against 98 per cent. in the previous two years.

Suburban and Residential Schemes.—The sales of land were better than in the previous year. The total area disposed of during the year was 82,352 square yards valued at Rs. 4,62,000 against the previous year's disposal of 26,499 square yards valued at Rs. 1,69,000.

The state-aided building scheme continued to encourage the purchase of plots in Khar. The number of persons who were granted advances during the year was 53 and the total amount advanced on land and buildings was Rs. 5,86,000.

At Chembur, sales and settlements of 32,300 square yards valued at Rs. 70,673 were effected during the year, in addition to a few settlements with the owners of land on the Sion-Trombay road.

At Wadavli, 7,584 square yards were disposed of by way of settlements, and elsewhere in Trombay an area of 500 square yards valued at Rs. 1,250 was sold and 700 square yards disposed of under settlement.

All the roads in the Danda Suburban Scheme were handed over to the Bandra Municipality for future maintenance and 13,621 square yards of land valued at Rs. 1,04,940 were disposed of.

As in past years the demand for land continued to be greater in Khar Suburban Scheme than in any other. 202 bungalows have so far been constructed and 20 more are under construction in the scheme area.

In the Chapel Road, Bandra Suburban Scheme, only three plots measuring 2,265 square yards valued at Rs. 14,000 remain for disposal. 52 bungalows have so far been constructed and 10 are under construction in this scheme.

Water-Supply Schemes.—Several sub-schemes and extensions for water-supply were completed during the year, the principal one being that of water-supply to Versova.

PART II

CHAPTER I

INDIAN STATES

THE territories under the rule of Indian Princes and Chiefs in political relations with the Government of Bombay extend over an area of 28,562 square miles, or less than one-fourth of the entire area of the Presidency. The variety of the relations which, under the terms of the several treaties, subsist between the British Government and the rulers of the different States and position and responsibilities of Government as Paramount Power, necessitate the presence of an Agent or representative at or in touch with the principal Courts. The smaller and less important States are either grouped together under the general supervision of a Political Agent or are looked after by the Collectors of the districts within the local limits of which they may happen to be situated. The position of the Agent varies, roughly speaking, with the importance of the State. In some cases he does little more than give advice and exercise a general surveillance. In other cases Agents are invested with a direct share in the administration ; in such cases a considerable amount of judicial work devolves on the Governor in Council, in criminal cases as a Court of Reference and Appeal, and in civil matters as a Court of Appeal. The States in which the Ruler is a minor are directly managed by Government Officers or under arrangements approved by Government.

The Gujarat States fall into two groups. The North Gujarat States lie mostly to the North of the Narbada and include the Rewa Kantha, Mahi Kantha and Kaira Agencies. The South Gujarat States, which lie to the south of the Tapti, are those in the Surat Agency.

The Maratha States fall into four groups. The North and South Konkan groups lie below the ghats to the north and south of Bombay, respectively. The Deccan and the Southern Maratha Country States are situated in the central and southern portions of the Bombay Deccan. The province of Sind contains one State. The Settlement of 'Aden, including Perim, directly administered by the Government of Bombay, is also included in this review.

The population of these States is about four millions and their revenue nearly five crores.

I. North Gujarat

1. MAHI KANTHA

Ruling Prince with a salute of 15 guns—

Lieutenant-Colonel His Highness Maharaja Sir Daulatsinhji Pratapsinhji, K.C.S.I., Maharaja of Idar; *Residence*—Himatnagar; *Caste*—Rathod Rajput, Hindu; *Age*—51; *Educated* at the Nobles' School at Jodhpur and the Mayo College at Ajmere; *Has male heir.*

Ruling Prince with a salute of 9 guns—

Maharana Shri Bhavanisinhji Hamirsinhji, Maharana of Danta; *Residence*—Danta; *Caste*—Parmar Rajput, Hindu; *Age*—30; *Has no male heir.*

The Rao of Vijayanagar (Mahi Kantha)—

Rao Shri Hamirsinhji, Rao of Vijayanagar (Mahi Kantha); *Residence*—Vijayanagar (Mahi Kantha); *Caste*—Rathod Rajput, Hindu; *Age*—25; *Educated*—Scott College, Sadra, and the Mayo College, Ajmere.

Area—3,124 square miles; *Population (1921)*—450,478; *Gross revenue based on five years' average*—Rs. 28½ lakhs; *Tribute to His Highness the Gaikwar of Baroda by Idar*—Rs. 30,340; *by small States and Talukas*—Rs. 91,328; *Principal articles of production*—Wheat, gram, cotton, bajri, jowari and all common grains, marble and steatite.

In addition to these three States, the Agency includes 48 small States and Talukas.

The severe frost which occurred at the end of January 1929 caused great damage to the rabi crops and trees and vegetation in general throughout the Agency, the damage being most severe in the Idar State where outright destruction of the rabi crops occurred in some parts. Measures for relief by way of remission and suspension and grant of takavi advances to the needy cultivators were adopted. The outturn of monsoon crops varied from 8 to 10 annas in the rupee while that of winter crops was from ½ to 6 annas in the rupee. The supply of fodder and water was sufficient.

The total expenditure amounted to Rs. 25¾ lakhs, the principal items being Police Rs. 3⅓ lakhs (the total strength of the Police in the Agency being 1,358); Prisons Rs. 25,000; Public Works Rs. 81,700; and Medical Relief Rs. 36,800.

The total number of schools was 180 with 12,083 pupils. The expenditure was Rs. 1,10,900.

2. REWA KANTHA

Ruling Prince with a salute of 13 guns—

Captain His Highness Maharana Shri Sir Vijayasinhji Chhatrasinhji, K.C.S.I., Maharaja of Rajpipla; *Residence*—Nandod (Rajpipla); *Caste*—Gohel Rajput, Hindu; *Age*—39; *Educated*—Rajkumar College, Rajkot, and Imperial Cadet Corps, Dehra Dun; *Has male heir.*

Ruling Princes with a salute of 9 guns—

Maharaval Shri Natwarsinhji Fatehsinhji, Raja of Chhota Udepur; *Residence*—Chhota Udepur; *Caste*—Chavan Rajput, Hindu; *Age*—23; *Educated*—Rajkumar College, Rajkot.

Captain His Highness Maharaval Shri Sir Ranjitsinhji Mansinhji, K.C.S.I., Raja of Baria; His Highness has a personal salute of 11 guns; *Residence*—Baria; *Caste*—Khichi-Chavan Rajput, Hindu; *Age*—43; *Educated*—Rajkumar College, Rajkot, the Imperial Cadet Corps, Dehra Dun, and England; *Has male heir.*

Maharana Shri Virbhadrasinhji Ranjitsinhji, Raja of Lunavada; *Residence*—Lunavada; *Caste*—Solanki Rajput, Hindu; *Age*—19.

Nawab Babi Shri Jamiatkhan Manvarkhan, Nawab of Balasinor; *Residence*—Balasinor; *Tribe and religion*—Babi Pathan, Suni Musulman; *Age*—35; *Educated*—Rajkumar College, Rajkot, and Imperial Cadet Corps, Dehra Dun; *Has no heir.*

Maharana Shri Jorawarsinhji Pratapsinhji, Raja of Sant; *Residence*—Sant; *Caste*—Parmar Rajput, Hindu; *Age*—48; *Educated*—Rajkumar College, Rajkot; *Has male heir.*

Area—4,956 square miles; *Population (1921)*—753,058; *Gross revenue based on five years' average*—Rs. 79 lakhs; *Tribute to His Highness the Gaikwar of Baroda*—Rs. 1,30,801; *Tribute to British Government*—Rs. 24,382; *Military Force*—1,566; *Principal articles of production*—Rice, wheat, bajri, jowari, cotton, maize, gram, mhowra (flower and seed) and timber; Akik (cornelian) stone in Rajpipla and Manganese in Chhota Udepur.

The Agency includes also 15 small States and 13 petty Estates.

The rainfall was sufficient and the season was good. The outturn of kharif crop was normal but the frost that fell in the latter part of January damaged the cotton and rabi crops in Rajpipla, Chhota Udepur, Balasinor, Sant and at certain places in the Agency.

The total expenditure amounted to Rs. 87⅓ lakhs.

The total number of schools was 251 and the number of pupils 18,171.

3. CAMBAY

(KAIRA AGENCY)

Ruling Prince with a salute of 11 guns—

His Highness Nawab Mirza Hussain Yavar Khan Saheb Bahadur, Nawab of Cambay; *Tribe and religion*—Moghal, Shia Musulman; *Age*—18. Being educated at the Rajkumar College, Rajkot. (The State is under administration owing to the Nawab's minority.)

Area—350 square miles; *Population (1921)*—71,715; *Gross revenue based on five years' average*—Rs. 9,94,237; *Tribute to British Government*—Rs. 21,924; *Military Force*—156; *Principal articles of production*—Jowari, bajri, kodra, rice, wheat, cotton, pulses, oil-seeds and tobacco; *Manufactures*—Cotton and silk cloths, carpets, matches and articles of agate and cornelian stone.

The rain received during the year was quite satisfactory as compared with the average. Paddy was transplanted in the early rains but the crop failed on account of insufficient rainfall. A large area was placed under cotton owing to favourable rains for that crop; but as the rain in September damaged it considerably, wheat was sown in most of the Bahara villages. Wheat, tobacco and cereals were considerably damaged by the severe frost in January.

The total expenditure amounted to Rs. 9 lakhs, the principal items being Police Rs. 62,000 (the total strength of the Police being 214); Prisons Rs. 5,800; Public Works Rs. 1,98,500; and Medical Relief Rs. 26,400.

The total number of schools was 61 with an average attendance of 3,908. The expenditure on education was Rs. 83,000. Primary education continued to be completely free throughout the State. It is made compulsory in all village boys' schools including one school for depressed classes in the town.

II. South Gujarat

(SURAT AGENCY)

1. DHARAMPUR, BANSDA AND SACHIN

Ruling Princes with a salute of 9 guns—

Maharana Shri Vijayadevji Mohandevji, Raja of Dharampur; *Residence*—Dharampur; *Caste*—Sisodia Rajput, Hindu; *Age*—45; *Educated*—Rajkumar College, Rajkot; *Has male heir.*

Maharaval Shri Indrasinhji Pratapsinhji, Raja of Bansda; *Residence*—Bansda; *Caste*—Solanki Rajput, Hindu; *Age*—41; *Educated*—Rajkumar College, Rajkot; *Has male heir.*

Major His Highness Nawab Sidi Ibrahim Muhammad Yakut Khan, Mubarizud Daula Nasrat Jang Bahadur, Nawab of Sachin. His Highness the Nawab has a personal salute of 11 guns; *Residence*—Sachin; *Religion*—Sunni Musulman; *Age*—43; *Educated*—Rajkumar College, Rajkot, Mayo College, Ajmere, and Imperial Cadet Corps, Dehra Dun; *Has male heir.*

Area—968 square miles; *Population (1921)*—155,273; *Gross revenue based on five years' average*—Rs. 24 lakhs; *Tribute to British Government*—Rs. 9,154; *Principal articles of production*—Rice, nagli, pulses, sugarcane, molasses; *Manufactures*—Cotton cloth.

The outturn of the crops at Dharampur and Bansda was 14 and 10 annas in the rupee, respectively. Much damage was done at Bansda to cotton and fruit trees and at Sachin to crops by frost at the end of January. The outturn at Sachin was in consequence only fair.

The total expenditure was nearly Rs. 25⅓ lakhs, the principal items being Police Rs. 1 lakh (the total strength of the Police force being 428); Prisons Rs. 4,512; Public Works Rs. 3½ lakhs; and Medical Relief Rs. 61,400.

The total number of schools was 69, the number of pupils 5,070 and the expenditure Rs. 92,900.

2. THE DANGS

Area—999 square miles; *Population (1921)*—24,576; *Gross revenue including the subsidy of the Dangs Rajas*—Rs. 43,440.

A wild tract thickly covered with forest. The inhabitants belong almost entirely to the forest tribes, mostly Bhils. There was an increase in the total area under cultivation due to continuous, regular and timely rains. With the exception of a little rice and pulse, the crops are confined to the inferior varieties of mountain grains.

The principal item of expenditure was Public Works Rs. 18,000. As regards education, the average number of pupils on the roll was 202 with an average attendance of 143.

III. North Konkan

1. JAWHAR (THANA AGENCY)

Ruling Prince with a salute of 9 guns—

Raja Saheb Shrimant Yeshwantrao *alias* Dada Saheb; *Caste*—Koli; *Age*—12 years. The State is under administration owing to the Raja's minority

Area—310 square miles; *Population (1921)*—49,662; *Gross revenue based on five years' average*—Rs. 5,42,700; *Principal articles of production*—Rice, nagli, pulses and timber.

The inhabitants of the State are mainly Kolis, Thakurs and Kathodies. These people are very backward and illiterate but peaceful and law-abiding. Their principal sources of maintenance are agriculture and labour. The rainfall was sufficient and well distributed and the crops were generally good everywhere in the State. There was a demand for labour in many parts of the State owing to forest cuttings and the manufacture of charcoal, etc.

The total expenditure amounted to about Rs. 4½ lakhs, the principal items being Police Rs. 13,800 (the total strength of the Police force being 70); Prisons Rs. 512; Public Works Rs. 66,300; and Medical Relief Rs. 6,600.

The total number of schools was 23 with a daily average attendance of 443·8 children. The expenditure on education was Rs. 18,500.

2. SURGANA (NASIK AGENCY)

Ruling Chief—Prataprao Shankarrao Deshmukh; *Residence*—Surgana; *Caste*—Maratha (Pawar), Hindu; *Age*—49; *Educated* in the Surgana State School; *Has male heir.*

Area—360 square miles; *Population (1921)*—14,912; *Gross revenue based on five years' average*—Rs. 73,000; *Principal articles of production*—Rice, nagli and timber.

The State contains 61 villages, of which 46 are Khalsa and 15 alienated.

The population consists chiefly of Konkani Kunbis and Kolis living in small groups of thatched and mud houses, whose chief occupation is agriculture carried on in the most primitive fashion. They are addicted to drink, but are peaceful and law-abiding.

The crops were damaged to a certain extent owing to shortage of rain at the end of the season. The condition of cattle was fair. The supply of fodder and drinking water was sufficient. The prices of grain and cloth were almost stationary.

The total expenditure amounted to Rs. 65,000, the principal items being Police Rs. 3,000 (the total strength of the Police being 20); and Medical Relief Rs. 1,400.

There are two vernacular primary schools in the Surgana State with an attendance of 68 pupils. The expenditure was Rs. 600.

IV. South Konkan

1. JANJIRA (KOLABA AGENCY)

Ruling Prince with a salute of 11 guns and, within State limits, of 13 guns—

His Highness Nawab Sidi Muhammad Khan Sidi Ahmed Khan, Nawab of Janjira; *Residence*—Murud, Janjira; *Tribe and religion*—Habshi, Sunni Musulman; *Age*—15; Being educated at the Rajkumar College, Rajkot. During the Nawab's minority the State with the dependency of Jafrabad is being administered by his mother as Regent assisted by the State Dewan.

Area—377 square miles; *Population (1921)*—98,530; *Gross revenue based on five years' average*—Rs. 8,55,000; *Military force*—243; *Articles of production*—Rice, nagli, vari, cocoanut, betelnut, bajri, jowari, cotton, hemp and sesamum.

The rainfall in Janjira was seasonable and fairly seasonable in Jafrabad. The outturn of crop was 12 annas in the State proper and from 10 to 12 annas in Jafrabad.

The State had an import trade worth nearly Rs. 21 lakhs and an export trade of Rs. 16 lakhs. The abkari and forest revenue was Rs. 1⅓ lakhs.

The total expenditure amounted to Rs. 9¾ lakhs, the principal items being Police Rs. 43,300 (the total strength of the Police force being 156); Prisons Rs. 3,200; Public Works Rs. 1½ lakhs; and Medical Relief Rs. 23,500.

The total number of schools was 89. The expenditure on education was Rs. 51,900.

There is an Anjuman-i-Islam Institution at Murud supported from popular subscription for encouraging and spreading education in the Muhammadan community.

2. SAVANTVADI (BELGAUM AGENCY)

Ruling Prince with a salute of 9 guns and, within State limits, of 11 guns—

Captain His Highness Raje Bahadur Shrimant Khem Savant Bhonsle *alias* Bapu Saheb, Sar Desai of Savantvadi; *Residence*—Savantvadi; *Caste*—Maratha, Hindu; *Age*—32.

Area—925 square miles; *Population (1921)*—206,440; *Gross revenue based on five years' average*—Rs. 6,75,000; *Principal articles of production*—Rice, nachni, vari and cocoanuts; *Manufactures*—Khaskhas, gold-thread and beetle-wing embroidery, horn works, toys and other lacquered wares, etc.

The rainfall was timely and sufficient during the year. The drinking water supply was adequate, but in the town of

Savantvadi a scarcity of water was felt during the two months of April and May owing to the insufficient flow of water from the Kesari head cistern. The outturn of rice and nachni was annas 12 each. The general health of the people was good. The agricultural stock was sufficient and good.

The total expenditure amounted to nearly Rs. 6½ lakhs, the principal items being Police Rs. 72,000 (the total strength of the Police force being 323); Prisons Rs. 2,334; Public Works Rs. 88,700; and Medical Relief Rs. 38,000.

The total number of schools was 162 with 9,694 pupils. The expenditure on education was Rs. 86,000.

V. The Deccan

SATARA JAGHIRS

(SATARA AGENCY)

Ruling Chiefs—

Meherban Bhavanrao *alias* Bala Saheb, Pant Pratinidhi; *Residence*—Aundh; *Caste*—Deshastha Brahman, Hindu; *Age*—61; *Educated*—Bombay University; *Has male heirs.*

Lieutenant Meherban Malojirao Mudhojirao *alias* Nana Saheb Naik Nimbalkar; *Residence*—Phaltan; *Caste*—Maratha, Hindu; *Age*—33; *Educated*—Rajkumar College, Rajkot; *Has male heir.*

(POONA AGENCY)

Ruling Prince with a salute of 9 guns—

Meherban Shrimant Raghunathrao Shankarrao Pandit, Pant Sachiv; Chief of Bhor; *Residence*—Bhor; *Caste*—Deshastha Brahman, Hindu; *Age*—51; *Educated* privately; *Has male heirs.*

(SHOLAPUR AGENCY)

Meherban Shrimant Vijayasinh Fatehsinh, Raje Bhonsle; *Residence*—Akalkot; *Caste*—Maratha, Hindu; *Age*—14; Being educated at the Rajkumar College, Rajkot. The administration of the State is carried on by the Regent Rani Saheb assisted by two councillors owing to Raje Saheb's minority.

(BIJAPUR AGENCY)

Meherban Vijayasinh Ramrao *alias* Baba Saheb Daphle; *Residence*—Jath; *Caste*—Maratha, Hindu; *Age*—20; *Educated*—Deccan College, Poona. The Chief was installed on 12th January 1929 and has been conducting the administration of the State with the help of the Government Adviser.

Area—3,301 square miles; *Population (1921)*—402,169; *Gross revenue based on five years' average*—Rs. 27,90,000; *Tribute to British Government*—Rs. 40,000; *Military force*—281.

Rainfall was generally sufficient in most parts of the State. The kharif and rabi crops were on the whole fair and the prices of food grains showed a slight increase. The supply of drinking water and fodder was sufficient.

The total expenditure amounted to Rs. 29¾ lakhs, the principal items being Police Rs. 1⅛ lakhs (the total strength of the Police force being 570); Prisons Rs. 18,500; Public Works Rs. 2½ lakhs; and Medical Relief Rs. 32,000.

The number of schools was 253 and the number of pupils 14,150. The expenditure on education was nearly Rs. 1¾ lakhs.

VI. Kolhapur and Southern Maratha Country States

1. KOLHAPUR

Ruling Prince with a salute of 19 guns—

Lieutenant-Colonel His Highness Shri Sir Rajaram Chhatrapati Maharaj, G.C.I.E., Maharaja of Kolhapur; *Residence*—Kolhapur; *Caste*—Kshatriya, Maratha, Hindu; *Age*—32; *Educated* in England and Ewing College, Allahabad.

Area—3,217 square miles; *Population (1921)*—833,726; *Gross revenue based on five years' average*—Rs. 113 lakhs; *Military force*—702; *Principal articles of production*—Jowari, rice, cotton, tobacco, sugarcane, groundnuts, etc.; *Manufactures*—Coarse cotton and woollen cloths, pottery and hardware.

The monsoon began rather late, but the rains were well distributed all over the State and caused a marked improvement in the condition of the crops. The prices of staple food grains remained normal throughout the year. The supply of drinking water and fodder was sufficient.

The total expenditure amounted to Rs. 43¼ lakhs, the principal items being Police Rs. 1¾ lakhs (the total strength of the Police force being 995); Prisons Rs. 46,600; Public Works Rs. 3½ lakhs; and Medical Relief Rs. 90,000.

The total number of schools was 744, the number of pupils 41,823 and the expenditure Rs. 4½ lakhs.

2. SOUTHERN MARATHA COUNTRY STATES

The Southern Maratha Country States consist of the Mudhol, Sangli, Jamkhandi, Miraj (Senior), Miraj (Junior), Kurundwad

(Senior), Kurundwad (Junior), Wadi and Ramdurg States. The Rulers of the two States who have salutes of 9 guns are :—

1. *Mudhol.*—Lieutenant Meherban Raja Sir Malojirao Venkatrao Raje Ghorpade *alias* Nana Saheb, K.C.I.E., Raja of Mudhol ; *Caste*—Maratha, Hindu ; *Age*—45.
2. *Sangli.*—Lieutenant His Highness Sir Chintamanrao Dhundirao *alias* Appa Saheb Patwardhan, K.C.I.E., Chief of Sangli. His Highness has a personal salute of 11 guns ; *Caste*—Konkanasth Brahman, Hindu ; *Age*—40.

Area—3,044 square miles ; *Population (1921)*—608,294 ; *Tribute to British Government*—Rs. 1,87,754 ; *Gross revenue based on five years' average*—Rs. 46,80,000.

The average rainfall was above normal. The yield of the kharif and rabi crops, though they suffered from grass-hoppers in certain areas, was on the whole fair. Fodder was sufficient and the supply of water was adequate.

The total expenditure amounted to Rs. 89 lakhs, the principal items being Police Rs. 3⅓ lakhs (the total strength of the Police force being 1,648) ; Prisons Rs. 31,700 ; Public Works Rs. 8½ lakhs ; and Medical Relief Rs. 89,600.

The total number of schools was 485 with a daily attendance of 25,369. The expenditure on education was Rs. 3¾ lakhs.

3. SAVANUR (DHARWAR AGENCY)

Ruling Chief—Captain Meherban Abdul Majidkhan Dilerjang Bahadur, Nawab of Savanur ; *Residence*—Savanur (Dharwar) ; *Tribe and religion*—Pathan, Musulman ; *Age*—39 ; *Has male heir.*

Area—70 square miles ; *Population (1921)*—16,830 ; *Gross revenue based on five years' average*—Rs. 1,95,000 ; *Principal articles of production*—Sadis, cholis and country blankets.

The rainfall was general. The early rains were scanty on the whole but late rains, though not seasonable, were occasionally heavy and had a beneficial effect on all crops. The unexpected rainfall in March last told adversely on the cotton crop to a small extent.

The total expenditure amounted to Rs. 1½ lakhs, the principal items being Police Rs. 9,400 (the total strength of the Police force being 49) ; Prisons Rs. 800 ; Public Works Rs. 50,000 ; and Medical Relief Rs. 4,000.

The total number of schools was 15, the number of pupils 1,142 and the expenditure Rs. 14,500.

VII. Sind

KHAIRPUR (SUKKUR AGENCY)

Ruling Prince with a salute of 15 guns and, within State limits, of 17 guns—

His Highness Mir Ali Nawaz Khan Talpur, Mir of Khairpur; *Residence*—Kot-Diji; *Tribe and religion*—Talpur, Baluch, Musulman; *Age*—45; *Educated*—Aitchison Chiefs' College, Lahore; *Has male heir.*

Area—6,050 square miles; *Population (1921)*—193,152; *Gross revenue based on five years' average*—Rs. 24,96,000; *Military force according to the reorganisation scheme*—280; *Principal articles of production*—Fuller's earth, carbonate of soda, cotton, wool, ghee, hides, tobacco and indigo; *Manufactures*—Cloth, leather, cutlery, cotton, silk and woollen goods, ivory, metal and lacquer wood works, glazed pottery and carpets.

The total area under cultivation was nearly 195,000 acres. Expenditure amounted to Rs. 23½ lakhs, the principal items being Police Rs. 81,000 (the strength of the Police force being 276); Prisons Rs. 19,800; Public Works Rs. 4 lakhs; and Medical Relief Rs. 43,400.

The number of schools was 120, with an average daily attendance of 4,266·14.

VIII. Aden

Area (including Perim)—80 square miles; *Population (1921)*—56,500; *Gross revenue based on five years' average*—Rs. 81,97,636.

The Resident and Commander-in-Chief at Aden administers the Settlement of Aden and the Island of Perim.

The Settlement of Aden comprises the following divisions: (1) The Peninsula and Isthmus or Aden proper, (2) Sheikh Othman and (3) Little Aden.

Major T. C. W. Fowle, C.B.E., held charge of the Residency from 1st April to 15th July 1928. Sir Stewart Symes, K.B.E., C.M.G., D.S.O., held charge from 16th July 1928 to 31st March 1929.

The total expenditure amounted to Rs. 61¾ lakhs, the principal items being Police Rs. 2·08 lakhs; Prisons Rs. 20,500; and Public Works Rs. 1·10 lakhs.

There were in all 52 schools in the Settlement of Aden, attended by 2,928 pupils. The total expenditure on education in Aden from all sources amounted to Rs. 1·09 lakhs of which Rs. 38,000 were spent by Government.

Condition of the People

The year was, on the whole, fairly good and there was no actual scarcity of food and fodder in any area. The outturn of crops was good in many places. The prices of agricultural produce was stationary except in the case of cotton and tobacco for which they ruled lower than in the previous year due to deterioration in the quality of the produce as a result of the severe frost. Wages remained generally same as last year. The condition of the agricultural stock was good. Except for the areas where destruction of rabi crops occurred owing to the frost the condition of the agriculturists was, on the whole, fairly satisfactory. Public health was good.

CHAPTER II

ADMINISTRATION OF THE LAND

LAND RECORDS

THE functions of the Land Records Department are to provide statistics necessary for sound administration in all matters connected with the land, to reduce, simplify and cheapen litigation in the Revenue and Civil Courts, to provide a Record of Rights for the protection of all who hold interests in land, and lastly to simplify and cheapen periodical settlement operations.

The Land Records staff consists of a Director of Land Records, who is also Settlement Commissioner, four Superintendents of Land Records, District Inspectors and Circle Inspectors. The function of the Director of Land Records has been limited to inspection and advice, and the administration of the department.

The staff of the department is divided into three sections :

(*a*) the district staff of Circle Inspectors under the Collectors,

(*b*) the cadastral survey staff (including City Survey staffs) under the Department of Land Records, and

(*c*) the staff in District survey offices, who keep all the Survey Records up-to-date.

The Superintendents and the District Inspectors of Land Records supervise all the three sections, but in respect of (*a*) their function is rather to advise and assist while the actual orders are given by the Revenue Officers. As to (*b*) and (*c*) the administration is direct.

A complete Record of Rights and interests in lands has been prepared for all unalienated and many alienated villages throughout the Presidency and steps are being taken to prepare it for the remaining alienated villages also. The record has proved of very great value to the land revenue administration and to the public at large who are not slow in realising its importance as an authentic record of their titles.

City surveys form an important part of land records. Such surveys have now been introduced in Bombay City and in most of the important cities and towns in the Presidency. The progress of this work is being maintained. Suitable arrangements have also been made for the maintenance of city

survey records after completion. In Bombay a special office, *viz.*, the Bombay City Survey and Land Records Office, does this work under the control of the Collector of Bombay.

On account of the close connexion which necessarily exists between the Records of Rights and the deeds registration, which is the business of the Registration Department, the offices of the Director of Land Records and Inspector General of Registration are placed under the control of one officer who holds both appointments. This officer also exercises general control over the work of the Photozincographic Press at Poona, instituted originally for the printing of cadastral maps. He is also in administrative control of the department of the Consulting Surveyor to Government.

GUJARAT TALUKDARS ACT

Under the provisions of various Acts including the Gujarat Talukdars Act, the Court of Wards Act, the Guardians and Wards Act, etc., Government are empowered to take over the management of estates whose owners by reason of minority, incapacity, etc., are not considered capable of looking after them. A large number of these is in the Ahmedabad district where in all there are 20 estates managed by the Collector who is also Talukdari Settlement Officer.

The revenue demand for the year including past arrears was Rs. 5·25 lakhs, out of which Rs. 4·20 lakhs were recovered and Rs. 1,000 were written off. The total rental demand of the estates under management including arrears of past years was Rs. 93,500, out of which about Rs. 69,300 were collected and about Rs. 200 were written off.

There were 21 sons of Talukdars receiving education at the Talukdari Hostel at Dhandhuka at the close of the year as against 22 last year.

Ten estates were released from management during the year. Efforts are being made to withdraw management from other estates and to ensure that Talukdars have the same facilities for credit as other landowners.

SIND INCUMBERED ESTATES ACT

The Sind Incumbered Estates Act of 1881 was passed by the Government of India in order to amend the law providing for the relief of Jagirdars and Zamindars in Sind and this Act was further amended in 1896. The management of such estates is undertaken upon an application by the landholder and a Special Officer designated "Manager, Sind Incumbered

Estates" has been appointed to supervise the management of these estates under the control of the Commissioner in Sind. There has been a steady decrease in the number of estates under management in recent years, the number in 1925-26 being 143 as against 278 in 1911-12 and 292 in 1915-16. The estates are leased to outsiders or to the estate owners, but generally to the latter whenever this is possible.

Thirty-eight new estates were taken under management and 30 were released, leaving 144 under management at the close of the year as against 136 last year. The revenue was about Rs. 12¼ lakhs and the cost of management increased from 5·71 per cent. to 6 per cent.

THE COURT OF WARDS ACT

The Bombay Court of Wards Act was passed in 1905. Under this Act the Commissioners of Divisions are the Courts of Wards for the limits of their Divisions. With the sanction of Government, they assume superintendence of estates of landholders who, on account of minority or physical or mental defects or infirmity, are not qualified to manage their property and also on application by the landholders of estates that are heavily indebted. Suitable arrangements are also made for the education of minor wards.

DEPARTMENT OF LAND RECORDS

The foundation of society and industry in India is in the land and the maintenance of a complete record of all rights is a great bulwark of public peace and of law and order. Moreover without such records it will be impossible to get true statistics of any species of production or any of the other economic facts connected with the land.

A great support of the Indian Administration is the land revenue, the right of the State to share in all the unearned rental values of land. The science of economics and fiscal theory is recognising more and more fully the right of the public to this share, and the pre-eminent position of the land revenue in every scheme of taxation necessary for the maintenance of a modern State. Survey and classification of land, and a full record maintained, not spasmodically, but every day as every change occurs, is indispensable for the assessment and collection of land revenue. This is a task which is never completed. It extends to the cities as well as the country-side and forests. Uninteresting and tedious as much of its work must be, nevertheless the work of the Land Records Department lies as the

woof and warp underneath all the elaborate material of which the administration is composed.

The main function of the department is to maintain all survey and classification records up-to-date, and for this purpose to carry out the field operations preliminary to the incorporation of changes in these records. It has further to organise and carry out rural and city surveys on an extensive scale and to maintain them in a state of usefulness. Special surveys for private individuals or bodies such as relate to inam villages, surveys in connection with Railway or Municipal or Local Board projects, etc., and surveys on behalf of other departments of Government and Indian States are also frequently undertaken. The supervision of the preparation and maintenance of the Record of Rights, the periodical inspections of boundary marks and the introduction of revenue settlements complete the function of the department.

An important innovation by this department during the year was the introduction of the new combined V. F. VII and XII Forms which give statistics of rents and tenancies, and the exact area of land tenanted in every possible way, and self-cultivated. These forms also give data for the preparation of Electoral Rolls, which have been hitherto very incomplete. They also yield statistics which will be useful for the consideration of tenancy legislation.

ROUTINE MEASUREMENT WORK

Northern Division.—Twenty-one Cadastral and six District Surveyors were employed on this work throughout the year, and two Cadastral Surveyors for 3¾ months only. Six City Survey Maintenance Surveyors were also employed on this work for 3¾ months. This staff measured 19,507 new hissas and 3,642 survey numbers on private application ; and 1,885 survey numbers on Government account. The cost was Rs. 32,121, while the fees earned (including fees for Government work on the scale charged to the public) amounted to Rs. 34,164.

Central Division.—Forty-two Cadastral Surveyors and seven District Surveyors were employed. They measured 6,174 survey numbers and 13,568 hissas on private application, and 1,909 survey numbers and 3,809 hissas involved in Government work. The cost was Rs. 58,090, while the fees earned (including cost for Government work estimated as above) amounted to Rs. 51,906.

A temporary staff of 178 hands including Nimtandars under one Survey Mamlatdar was employed on sub-division

measurement work. They measured in all 153,420 sub-divisions in 172 villages in 2 talukas of Satara District.

Southern Division.—Twenty-three permanent and eighteen temporary Cadastral Surveyors with five District Surveyors were employed during the year. They measured 14,134 new hissas and 6,113 survey numbers and 70 hissas on private application and 3,956 survey numbers and 3,384 hissas involved in Government work. The cost was Rs. 40,674 and the fees earned (including cost of Government work estimated as above) amounted to Rs. 44.883.

Besides, one party of seven measurers measured 3,958 hissas in 1 rayatwari and 3 khoti villages of Mahad taluka, completing the hissa survey work in Kolaba district. Another five parties of 53 measurers under a Survey Mamlatdar measured 36,262 hissas in 193 villages of Kumta, Ankola and Sirsi talukas of Kanara district. Total expenditure incurred on this survey was Rs. 30,869. In the Ramdurg State 5,948 pot-hissas were measured in 17 villages.

Bombay Suburban Division.—Two hundred and seventy-seven correction cases affecting 577 survey numbers and 1,053 miscellaneous cases were disposed of during the year. The sale proceeds of printed maps and extracts from survey records amounted to Rs. 921 while the approximate cost of extracts supplied free to Government officers was Rs. 633.

Sind.—In all, 1,094 theodolite stations and 19,009 properties were reviewed during the year. The Superintendent, Land Records in Sind, inspected the maintenance work of all the surveys, including Karachi, during the year and also tested 255 survey numbers measured by the village establishment and 10 survey numbers out of those measured by a Revenue Surveyor of the department in Guni taluka.

Northern Division.—Three field party surveyors were employed in Gujarat. They did the classification of deteriorated garden lands in Chikhli taluka of Surat district. In all 4,218 acres in 3,614 survey numbers were reclassified and sub-soil assessment was examined for 333 wells and 196 dhekudis. Other surveyors measured in Thasra and Kapadwanj talukas of Kaira district 5,000 acres of land leased on what is called "the Kaira Lease". The village of Chharodia in Dhandhuka taluka, Ahmedabad district, was resurveyed as the field boundary marks in the village had disappeared. Two villages in South Daskroi taluka of Ahmedabad district were resurveyed at the

cost of the villagers as they wanted a resurvey to prevent expenditure on periodic boundary marks repair. 1,080 acres of land in the inam villages of Bhuwa and Mangleshwar in Broach taluka were surveyed for partition under the Civil Court's decree. In Thana district three field party surveyors reclassified deteriorated garden lands in Bassein taluka. 31 acres in 20 survey numbers were measured and 5,419 acres in 1,843 survey numbers were reclassified.

Central Division.—For the purpose of introducing a settlement, measurement in four and classification in six and traverse work in two inam villages of Patan, Karad and Wai talukas of Satara district was completed. For the purpose of introducing a Record of Rights survey in seven inam villages of Patan taluka was taken up. In four villages the traverse work and in two villages measurement have been completed, leaving one village incompletely measured.

Southern Division.—For the purpose of introducing a settlement, two inam villages in Bagalkot taluka and one inam village in Bagewadi taluka of Bijapur district were surveyed. Classification in one inam village of Changad mahal of Belgaum district was completed. One inam village belonging to the Sangli State was also partially surveyed. For the introduction of a Record of Rights the survey of four inam villages of Chikodi taluka of Belgaum district, one inam village of Indi taluka in Bijapur district, one inam village of Dharwar taluka, nine of Ron taluka, one of Karajgi taluka, and one of Gadag taluka of Dharwar district were taken up. The survey in these fifteen inam villages was completed and in two inam villages it was partly done.

Bombay Suburban Division.—The survey staff consisting of five Cadastral Surveyors did the measurements of 1,097 cases involving 1,732 survey numbers and classification in three cases involving 22 survey numbers. They also disposed of 409 miscellaneous cases. Pot-hissas were measured by a special staff in seven villages of Goregaon estate and in the villages of Mahul, Borle, Anik and Maravli.

REVISION SETTLEMENTS

Northern Division.—No revision settlements were sanctioned but re-enquiries were made in the settlements already sanctioned for Bardoli, Chorasi and Viramgam talukas. The calculation of revised assessments of Bassein and Murbad talukas of Thana district was completed. The recalculation of assessment of Bardoli and Chorasi talukas was also completed except for 30 villages of Bardoli and 11 villages of Chorasi.

Central Division.—No revision settlements for Government villages were sanctioned. Assessments were calculated for 67 Government villages and 34 inam villages of Akrani mahal of West Khandesh.

Southern Division.—No revision settlements for Government villages were sanctioned. The settlements of two inam villages in Belgaum taluka were sanctioned. The calculation of the revised assessments of Roha taluka in Kolaba district was completed.

CITY SURVEYS

Northern Division.—Thirty-four cities and twenty-six village sites are under regular maintenance.

Central Division.—Thirty-one cities and six village sites are under regular maintenance. Enquiry work in one inam village site of Uruli Kanchan is in progress. The inquiry work in Mahabaleshwar and the re-enquiry work in Ahmednagar city are in progress.

Southern Division.—Nineteen city surveys are being regularly maintained. Enquiry work was completed in the town of Malwan.

Bombay Suburban Division.—In Bandra and Danda and in the surveyed village sites of Andheri, Ambiveli, Gundauli and Vile Parle the surveys were maintained. Twenty-seven encroachments were detected in the city and village site surveyed areas. Survey of the village site of Gorai was completed during the year.

Sind.—The maintenance work at Karachi, Larkana, Shikarpur, Garhi-Yasin, Sukkur, Rohri, Hyderabad and Jacobabad continued to be done throughout the year.

General Remarks.—The City Survey maintenance staff in large towns earns sufficient revenue to pay its cost ; in smaller towns the staff is hardly self-supporting. To remedy this to some extent, two or more of the smaller towns are put in charge of one maintenance surveyor, some of his routine and non-technical work being transferred to Sub-registrars according to convenience. Direct indexing in the property registers by Sub-registrars is a convenient arrangement by which the Property Index ordinarily maintained in Sub-registry offices can be dispensed with. The system is operating in certain towns in all the three Divisions. Government have recently sanctioned a scheme for doing city surveys in future without providing for their maintenance.

The system of writing the Property Register on cards is being extended to all city surveys in the Presidency.

WASTE LANDS

The following table shows the area under cultivation in the Province :—

1928-29

(In thousands of acres)

Division	Total culturable area	Occupied	Balance culturable waste
Northern	4,916	4,464	452
Central	14,380	13,979	401
Southern	7,855	7,635	220
Sind	14,515	8,245	6,270
Bombay Suburban	33	24	9
Total ..	41,699	34,347	7,352

CHAPTER III

LAW AND JUSTICE

THE power of making laws "for the peace and good government of the Bombay Presidency" is vested in the Legislative Council of the Governor of Bombay. It consists of 114 members. The four members of the Executive Council are *ex-officio* members, and of the remaining 110, 86 are elected and 24 nominated. Of the nominated members not more than 16 may be officials. The elected members are elected as follows :—

	Members
General constituencies—	
Muhammadan Rural	22
Muhammadan Urban	5
Non-Muhammadan Rural	35
Non-Muhammadan Urban	11
European	2
Special constituencies—	
Land-holders	3
Commerce and Industry	7
Bombay University	1
Total ..	86

Of the members of the non-Muhammadan constituencies 7 must be Mahrattas.

All British subjects of either sex who are over the age of 21 years and possess the necessary property qualification are, subject to certain minor exceptions, entitled to vote in general constituencies. The Government of Bombay has also power to permit subjects of Indian States to be enrolled as electors. The property qualification is fixed by Rules under the Government of India Act and is based, in the case of land, upon the amount of land revenue, and in the case of houses upon the annual rental ; in each case tenants as well as landholders are qualified to vote. Besides these, all income-tax payers and all retired soldiers of His Majesty's regular forces are enfranchised by the same Rules. A general election ordinarily takes place every three years. Before taking his seat every member must make an oath or affirmation of his allegiance to the Crown.

Legislative.—The extent of the power of the Council to make laws is defined by section 80-A of the Government of India Act. Generally it may make laws for the peace and good government of the territories constituting the Presidency of Bombay, but certain bills cannot be introduced without the previous sanction of the Governor General. The most important of these are—

(*a*) Bills imposing new taxes, except certain taxes specified in Rules made under the Act such as taxes on non-agricultural land and on amusements, succession duties and judicial stamp duties ;

(*b*) Bills affecting the public debt of India or any taxes, the proceeds of which go to the Government of India ;

(*c*) Bills affecting the navy, army or air force ;

(*d*) Bills affecting the relations of Government with foreign princes or states ;

(*e*) Bills regulating a "central" subject.

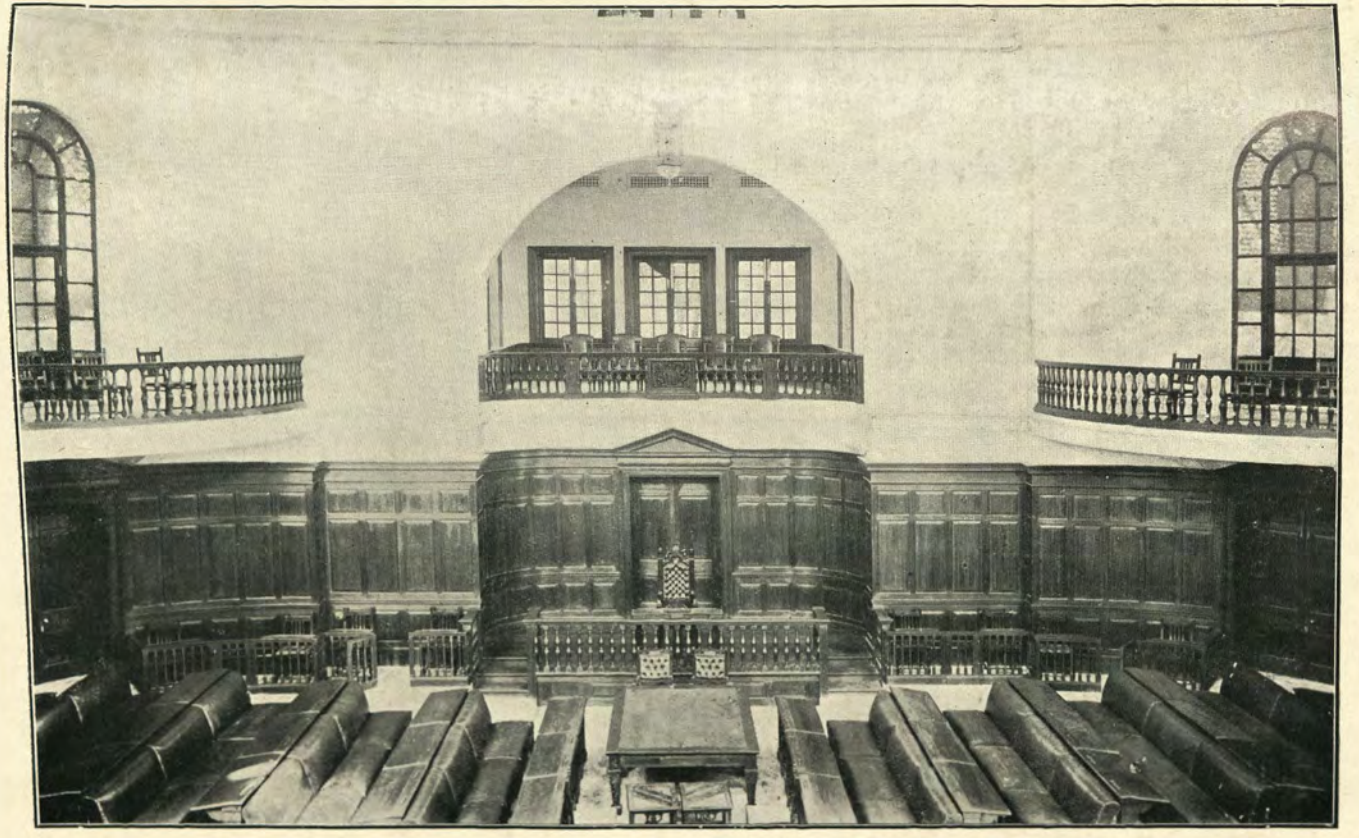
Central subjects are subjects of vital importance or subjects on which it is desirable that policy should be uniform throughout India. Some of the most important are external relations, defence of India, shipping, railways, posts and telegraphs, currency, civil and criminal law, commerce, all sources of all-India revenue and the all-India services. Again under section 80-C of the Government of India Act a bill affecting the public revenues of the province of Bombay or imposing any charge upon them, cannot be introduced without the previous sanction of the Governor.

RESOLUTIONS AND QUESTIONS

After non-official bills and motions to amend Standing Orders have been disposed of, any member may during the remaining time allotted to non-official business move a resolution on a matter of general public interest. Fifteen clear days' notice of such resolution must be given before the date appointed for the session of the Council.

Every resolution must be in the form of a specific recommendation to Government. The Governor may within the period of notice disallow a resolution or any part of a resolution on the ground that it cannot be moved without detriment to the public interest or that it relates to a matter which is not primarily the concern of the Local Government.

No resolution can be moved on any matter which affects the relations of Government with any foreign or Indian State, or relates to the internal administration of any Indian State, or which is *sub-judice*.



New Council Hall, Bombay.

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Questions for the purpose of obtaining information on a matter of public concern may be asked provided that 10 clear days' notice of the question is given. A question may be disallowed on any of the grounds on which a resolution on the subject might have been disallowed, and also on certain other grounds of which the most important are that it must not be in substance a suggestion for any particular action, nor ask for an expression of opinion.

COURSE OF LEGISLATION

Acts passed.—In the period between the 1st of April 1928 and 31st March 1929 eleven Acts were passed by the Legislative Council of the Governor of Bombay, and, having received the assent of their Excellencies the Governor and the Governor-General, became law.

The Acts were as follows :—

(1) Act No. IV of 1928 (An Act to amend the law relating to the University of Bombay) was passed mainly for the following reasons. For some time past there had been a general feeling among the educated classes of the Presidency that the constitution of the Bombay University needed reform in order to secure a University body more suited to the times, one which would be so constituted that the needs of learning and higher education would be met more adequately than was possible under the old system, especially in the direction of post-graduate teaching and research. The leading feature of the Act was that the constitution of the University was altered so as to make it adequately representative with a view to bring it into closer association with the public and with the industrial, commercial and civic life of the people of the Presidency, to enable them to provide greater facilities for higher education in all branches of learning, including technology, and to undertake on a larger scale than heretofore post-graduate teaching and research, while continuing to exercise due control over the teaching given by colleges affiliated to it from time to time. To facilitate the transition from the old to the new University, provision is made in this Act for the framing of statutes by the old Senate supplemented, if necessary, by Government. In other respects, the provisions of the Acts of 1857 and 1904 have been retained as far as possible.

(2) Act No. V of 1928 (An Act further to amend the Bombay Local Boards Act, 1923) was passed firstly with the object of making it clear that the proviso to section 50 (i) of the main Act was intended to prevent a salaried servant

of Government from drawing travelling allowance from local boards in addition to any travelling allowance which he might have received as such Government servant, and secondly with the intention of extending section 94 which provides for the method of assessment of the local fund cess in the case of alienated villages, to talukdari land.

(3) Act No. VI of 1928 (An Act further to amend the City of Bombay Improvement Trust Transfer Act, 1925) was designed to accelerate disposal of matters referred by the Improvement Committee to a sub-committee for enquiry and report under the provisions of clause (a) of sub-section (1) of Section 21 of the City of Bombay Improvement Trust Transfer Act, 1925. It also provided that as regards matters in respect of which the Improvement Committee's powers and duties have been delegated to any sub-committee under section 21 (1) (b), there shall be present at meetings of the sub-committee at least two-thirds of the members of the sub-committee from the beginning to the end of the transaction of business relating to such matters; and that, as regards all other business, there shall be a quorum of one-half (instead of the quorum of two-thirds) of the members of the sub-committees, who must be present from the beginning to the end of the transaction of that business.

(4) Act No. VII of 1928 (An Act further to amend the Bombay Public Conveyances Act, 1920) was designed to make one or two small amendments in the main Act which had been found to be necessary in the light of the experience of the last seven years.

(5) Act No. VIII of 1928 (An Act further to amend the City of Bombay Municipal Act, 1888) was passed with the intention of bringing that Act in conformity with the City of Bombay Improvement Trust Transfer Act, 1925.

(6) Act No. IX of 1928 (An Act further to amend the City of Bombay Municipal Act, 1888) was passed with the object of giving adequate representation to labour on the Bombay Municipal Corporation in order that the interests of the working population may be properly safe-guarded. In view of the fact that labour interests as such had not been recognized in the City of Bombay Municipal Act, as in the case of Local and Imperial Legislatures, and also of the fact that three capitalist bodies, *viz.*, the Chamber of Commerce, the Indian Merchants' Chamber, and the Bombay Millowners' Association, had been provided with representation in the said Act, it was considered desirable and fair that there should

be at least four representatives of labour in the Bombay Municipal Corporation.

(7) Act No. X of 1928 (An Act further to amend the City of Bombay Municipal Act, 1888) was passed in accordance with the wishes of the Bombay Municipal Corporation who had found certain difficulties in certain matters. For instance the Corporation found that the system of transferable vote for the election of the co-opted councillors was intricate and therefore the system of ballot was substituted. Under Section 28 (e) a company or a corporation whose name was entered in the ward roll, could name a person to vote for the Corporation or the Company. There was however no provision in the Act prescribing any time limit within which the name of the person recommended by the Company or Corporation should be intimated to the Commissioner. Provision is therefore made that the name of a person seeking to vote for a company or firm should be communicated to the Assessor and Collector not later than 5 p.m. on the day fixed for the election. Then for the disposal of property or other leases up to Rs. 500, the Commissioner was obliged to send a report to the Standing Committee. The Municipal Corporation thought that in such minor matters when the Standing Committee was of opinion that the Municipal Commissioner need not make a report to them, he should have the power to dispose of property or other leases upto Rs. 500, without sending a report to the Standing Committee. This change was therefore introduced in the amending Act. These and several other changes were introduced by the amending Act in order to give effect to the recommendations of the Corporation.

(8) Act No. XI of 1928 (An Act to amend certain enactments and to repeal certain other enactments) was passed with the object of making necessary amendments of a formal nature in certain enactments and repealing the Gaikwar of Baroda Ceded Lands Laws Acts, 1862 and 1918, as jurisdiction over lands governed by those Acts is now exercised under the Indian (Foreign Jurisdiction) Order in Council, 1902. A formal amendment was also made in section 4 of the Prevention of Cruelty to Animals Act, 1890. The section penalises the operation of "Phooka" on a cow. The object of the amendment is to make that operation even on a she-buffalo an offence, as a "Phooka" is frequently performed on she-buffaloes also. Then under section 19 (2) of the Mamlatdars' Courts Act, 1906, the Mamlatdar was

not required to record a memorandum of relevant facts observed at the inspection of property under dispute. The result was that if the finding of the Mamlatdar upon any issue was based upon any of these facts the parties did not become aware of it until the order was read out by him in the open Court. There is no appeal from the order and the facts as found by the Mamlatdar cannot be questioned in revision. The amendment did away with the resulting hardship to parties. The amendment made in sub-section (1) of section 18 of the Bombay Pleaders Act, 1920, was necessary on account of the repeal of section 17 of the Act by section 6 of the Legal Practitioners (Fees) Act, 1926.

(9) Act No. XII of 1928 (An Act to amend the Bombay University Act, 1928) was passed under the following circumstances : Section 18 (2) (e) of the Bombay University Act, 1928, empowered the Senate to make provision for the military training of students and appeared to assign to the authority of the University a function properly belonging to the Military Department. This was not intended. In fact the Military Department had provided all the requisite facilities for the military training of students under the Indian Territorial Force Act, 1920. The amendment, therefore, made it clear that the provision was not intended to do anything beyond enabling the University to make financial provision for the military training of students. Further the effect of section 35 (1) was to give power to the Syndicate themselves to frame ordinances laying down *inter alia* the conditions to be complied with by schools desiring recognition for the purpose of sending up pupils as candidates for the Matriculation Examination. This gave the Syndicate control over the policy of Secondary Education, which was not intended. The amendment therefore transfers this provision to section 33(2), thereby transferring to the Senate the power to make statutes with regard to the matters mentioned in section 35 (1) (e). Statutes framed by the Senate under Section 33 are subject to the sanction of the Chancellor under section 34 (2).

(10) Act No. 1 of 1929 [An Act further to amend the Indian Stamp (Bombay Amendment) Act, 1922] was passed with the object of making the Act applicable only for one year more in deference to the wishes of the Council, as the result of seven years' experience had proved the necessity for the retention of the revised scale of stamp-fees which was enacted in the original measure.

(11) Act No. II of 1929. [An Act to amend the Court-fees (Bombay Amendment) Act, 1926] was also passed with the object of making the Act applicable only for one year more, as the result of the last three years' experience had proved the necessity for the retention of the revised scale of court-fees which was enacted in the measure of 1926.

Bills.—Twelve Government Bills were published in the *Bombay Government Gazette*, but ten were introduced in the Legislative Council during the period under report. Of these six were passed into law, one was read for the first time and referred to Select Committee, one was withdrawn, two were merely published in the *Gazette*, while two though they were read for the third time, did not reach their further stages during the period under report.

There were also twenty-five Private Bills. Out of these Mr. N. A. Bechar's Bill further to amend the Bombay Rent (War Restrictions) Act, 1918, and the Bombay Rent (War Restrictions No. II) Act, 1918, and Mr. Jairamdas Doulatram's Bill to amend the Bombay District Vaccination Act, 1892, and Bill further to amend the Bombay Local Boards Act, 1923, were introduced, but lapsed owing to the resignations of the Honourable Members.

Mr. N. A. Bechar's Bill to restrict the increase of rent of certain premises in the municipal district and cantonment of Karachi was read for the third time, but it did not reach its further stages during the period under report.

Mr. H. V. Pataskar's Bill to amend the Bombay Pleaders' Act, 1920, was read for the third time, but it did not reach its further stages.

Rao Bahadur R. R. Kale's Bill further to amend the Bombay Land Revenue Code, 1879, was read for the first time and referred to a Select Committee, while 19 Bills were merely introduced and were not moved at any of the Sessions during the period under report.

Budget.—The budget was presented to the Council on 18th February 1929, and twelve days were allotted for the discussion of demands for grants. Cuts amounting to Rs. 16,01,100 only were made in the Budget as originally presented to the Council. There were three Divisions one of which was carried against Government.

Standing Orders.—Only one important amendment to the Standing Orders was passed by the Council during the year under report by which for Standing Order II 3 (2), the following clause was substituted: "On the prorogation of a Session, al

pending notices, except those in respect of questions and statutory motions, shall lapse, and fresh notice must be given for the next session." The effect of this amendment is that it leaves the question of notices of resolutions where it was, but with respect to questions all pending notices are carried over to the next session and no fresh notice is necessary.

Resolutions.—Six resolutions were moved during the period under report out of which three were carried and three were withdrawn. The Resolutions which were carried were :—

(1) This Council recommends to Government to appoint a Committee with a majority of non-official members of the Council to inquire into the educational and economic condition and the grievances of the depressed classes (untouchables) and of the aboriginal tribes in the Presidency and to recommend measures for their uplift.

(2) This Council disapproves of the resolution issued by Government on the report of the Land Revenue Assessment Committee and recommends to His Excellency the Governor in Council that the Bill for the amendment of the provisions of the Bombay Land Revenue Code, 1879, relating to the principles of revising the assessment of land revenue should be drafted in consultation with non-official members of this Council before it is submitted to the Government of India for sanction.

(3) This Council requests His Excellency the Governor of Bombay to convey to His Majesty the King Emperor an expression of the deep sympathy of the members of the House in His Majesty's long and continued illness and their sincere and earnest wish for his speedy recovery.

Of the above resolutions Nos. (1) and (3) were accepted by Government while No. (2) was carried as amended against the wishes of Government.

Five Government Resolutions and motions were moved by Government members. Of these four were passed by the Council while one was carried as amended.

In addition to the above, references appreciating the services of Sir Cowasji Jehangir, Sir Chunilal Mehta and the Right Honourable Shrinivasa Sastri and condolatory references to the deaths of the Right Honourable Syed Amir Ali and Lala Lajpatrai were also made in the Council during the year under report.

Motions for adjournment of the House.—There were two motions for the adjournment of the House to discuss definite matters of urgent public importance. Out of these one was ruled out of order by the Honourable the President while in

the case of the other leave for adjournment being granted it was carried in Council by a large majority against the wishes of Government.

Several Honourable Members tendered resignations of their seats in the Council and sought re-election during the year under report as a protest against the refusal by Government of the request of the Bardoli people for a fresh and independent inquiry into the revision of the Settlement of the Taluka.

ADMINISTRATION OF JUSTICE

The High Court, consisting of a Chief Justice and nine Puisne Judges, has both ordinary and extraordinary civil and criminal jurisdiction and exercises original and appellate functions. The appellate Judges of the High Court also supervise the administration of justice by Subordinate Civil and Criminal Courts. Ordinary original jurisdiction is exercised in matters both civil and criminal, which arise within the limits of the Town and Island of Bombay, but the High Court may in Civil cases remove and itself try any suit brought in any Court under its superintendence, and, in criminal cases, exercise jurisdiction over all persons residing in any place whose Courts are subject to the superintendence of the High Court.

In the Mofussil, the administration of civil justice is, in addition to the High Court and the Court of the Judicial Commissioner of Sind, entrusted to four grades of Courts, those of District and Assistant Judges and of two classes of officers styled, respectively, First and Second Class Subordinate Judges.

The Small Causes Court.—For the more easy recovery of small debts and demands, Courts invested with summary powers have been established in the City of Bombay and in Ahmedabad, Poona and Karachi. The Judges of the mofussil Small Causes Courts have jurisdiction in money suits within the towns where the Courts are situated up to Rs. 500 in value and their decisions are final, save in so far as they are subject to reference on points of law to the High Court or to the supervision of the High Court in its extraordinary jurisdiction. The jurisdiction of these Courts may be extended to Rs. 1,000 and they can also be invested with appellate jurisdiction. The Presidency Small Causes Court has cognisance in suits not exceeding Rs. 2,000 in value arising within the Island of Bombay.

Criminal Courts.—District and Assistant Judges under the title of Sessions Judges, Additional and Assistant Sessions Judges exercise criminal jurisdiction. But the executive district officers who in addition to their revenue duties are invested with magisterial powers, dispose of original criminal work to a great

extent. There are under the provisions of the Criminal Procedure Code, in addition to the High Court, four grades of Criminal Courts—those of the Magistrates of the Third, Second and First Class respectively and the Courts of Sessions.

Bombay Presidency (Proper)

CIVIL JUSTICE

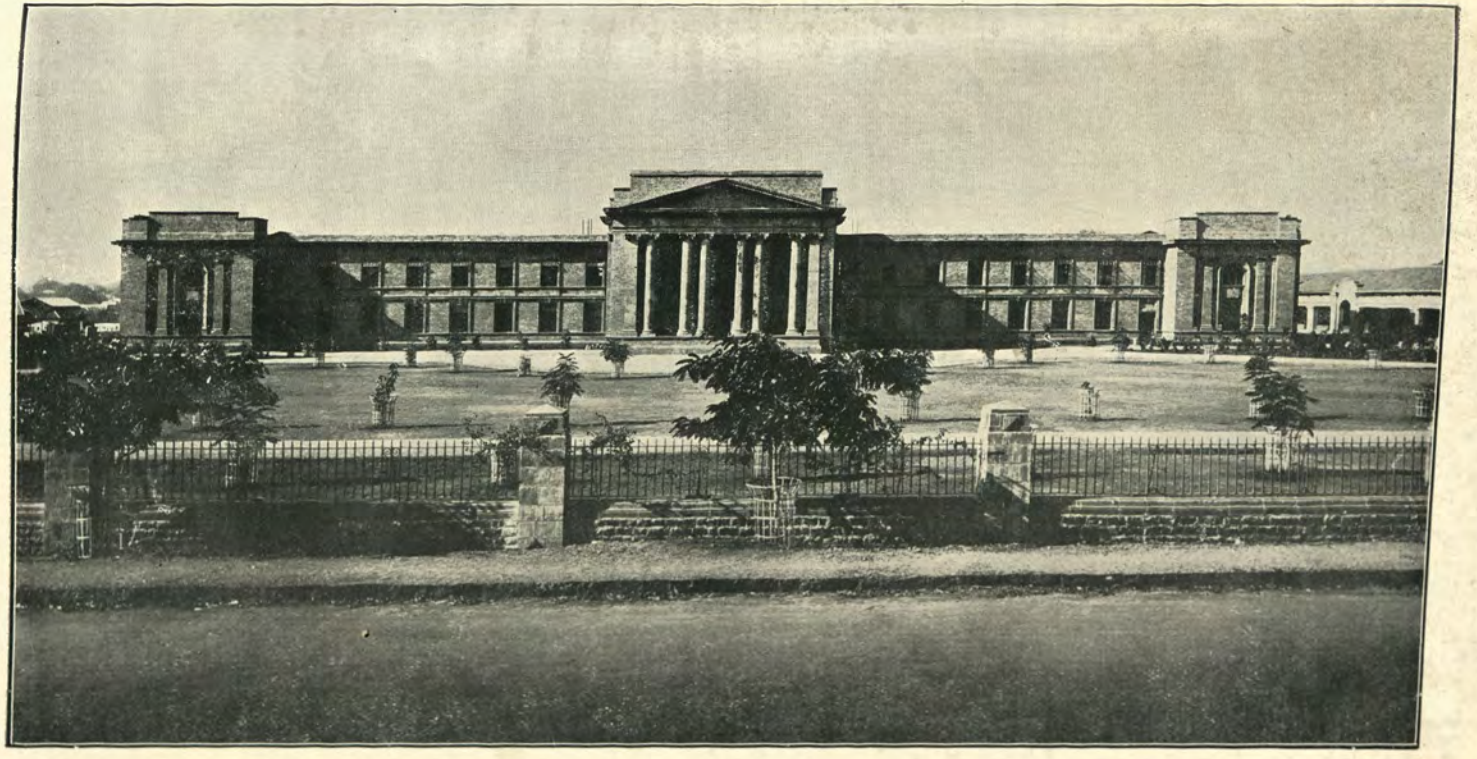
The permanent civil judicial staff employed in the Presidency during 1928 consisted of 8 permanent High Court Judges, 2 temporary Additional Judges, 17 District Judges, 11 Assistant Judges, 8 Small Cause Court Judges, 22 First Class Subordinate Judges and 99 Second Class Subordinate Judges. There were also 3 Inamdars and Jagirdars exercising the powers of Subordinate Judges and 43 Village Munsiffs.

High Court.—The aggregate number of suits for disposal before the Original Side of the High Court was 5,636 against 5,860 in the preceding year. Of these 2,745 were instituted during the year. The number of suits decided was 2,576 leaving a balance of 3,060 suits undisposed of at the close of the year. Of these three were nine years old, 14 six years, 46 five years, 140 four years, 312 three years, 457 two years, 645 one year and 1,435 less than a year. Besides, the High Court dealt with 22 suits under the Testamentary and Intestate Jurisdiction, three under the Admiralty and Vice-Admiralty Jurisdiction and 14 under Parsi Matrimonial Jurisdiction. There were also for disposal 5,674 Insolvency Petitions. Of these, 1,721 were decided and 3,953 remained pending at the close of the year.

On the Appellate Side the High Court dealt with 127 cases in appeals from the High Court decrees and orders, etc. The number of appeals instituted from the Subordinate Civil Courts was 1,765 while the number pending from the previous year was 2,367. The total number of appeals disposed of was 1,560 leaving a balance of 2,572 pending at the close of the year. The report indicates also a comparative statement of Appellate Civil work of the High Court during the past four years. The following are the figures :—

Year	Cases instituted	Cases disposed of
1925	3,038	3,385
1926	3,097	2,552
1927	3,285	2,711
1928	3,658	3,355

The figures of suits instituted in the Bombay Small Cause Courts numbered 34,229 and those disposed of 34,140 and the



District Court Building, Poona.

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number pending at the close of the year was 4,742. The institutions and disposals show a decrease of 1,525 and 2,752 whereas the number of suits pending show an increase of 89 over the figures of the previous year. Of the total number of suits instituted 308 were not exceeding Rs. 10 in value, 7,342 were valued at between Rs. 10 and Rs. 50, 8,461 between Rs. 50 and Rs. 100, 14,245 between Rs. 100 and Rs. 500, 2,523 between Rs. 500 and Rs. 1,000, 1,350 between Rs. 1,000 and Rs. 5,000. The total value of the litigation in the Small Causes Courts was Rs. 76·91 lakhs against Rs. 81·56 lakhs in the previous year. Of the 34,140 suits disposed of 789 were decided without trial, 28,590 without contest, 4,686 after contest and 75 on reference to arbitration.

Mofussil Courts.—The number of suits instituted in the Civil Courts in the mofussil subordinate to the High Court was 155,968 showing an increase of 12,155 over the figures of the previous year. The former figure includes 1,612 suits instituted in the Village Munsiffs' Courts. The increase occurred in money suits to the extent of 8·5 per cent. while 8·2 per cent. in title and other suits, the number of money suits being 128,313 as against 118,255 and that of title and other suits being 27,655 as against 25,558 in 1927. The aggregate value of suits instituted amounted to Rs. 522·28 lakhs, an increase of Rs. 52·58 lakhs.

The largest number of suits instituted during the year 1928 was in East Khandesh (19,015). In no other district except Poona, West Khandesh, Nasik, Kaira and Ahmedabad did the institutions exceed 10,000. Institutions ranged between 5,000 to 10,000 in Ratnagiri, Dharwar, Belgaum, Sholapur, Bijapur, Ahmednagar, Satara, Thana, Surat, Broach and Panch Mahals. Kanara showed only 3,604 suits as instituted while the lowest figure 3,493 came to the share of Kolaba.

In addition to the 155,968 suits instituted during the year and 62,639 suits pending from the previous year 1,948 suits were revived or received on remand or review making a total of 220,555 for disposal.

The number of suits disposed of during the year was 153,976, an increase of 10,864. The former figure includes those decided by the Village Munsiffs' Courts.

Of the total number of suits disposed of during the year, viz., 153,976, Paid Sub-Divisional Tribunals (that is Courts of Subordinate Judges) disposed of 140,505 suits, Small Cause Courts 11,373, District Courts 464, Village Munsiffs' Courts

1,583 and the remaining 51 suits were decided by Unpaid Tribunals (that is, Inamdars and Jagirdars).

Out of the suits disposed of during the year 18,252 or 11·9 per cent. were disposed of without trial; 60,915 or 39·6 per cent. without contest; 73,812 or 47·9 per cent. with contest and 997 or·6 per cent. by compromise. Of the 73,812 suits decided on contest, 66,419 or 90 per cent. resulted in favour of the plaintiffs and 7,393 or 10 per cent. in favour of the defendants.

The total number of applications for execution of decrees before the Civil Courts was 204,994. Of these 140,141 were disposed of, leaving 64,853 pending for disposal. The number of miscellaneous institutions fell from 12,970 to 12,880.

As compared with the figures of 1927 the number of suits instituted and disposed of in the Subordinate Judges' Courts in 1928 increased by 10,043 and 9,437 respectively, the number of regular suits disposed of being more by 633 and those under Small Cause Court Jurisdiction being more by 8,804. With the number of revived suits and those pending at the end of the last year the total number of suits pending shows an increase from 57,675 to 61,114 whereas the number of suits pending over a year show a decrease from 5,521 to 5,276. The total number of appeals dealt with by the Mofussil Courts was 4,975. The number of appeals disposed of by the District Courts decreased by 342. The First Class Subordinate Judges exercising Appellate Powers disposed of 201 appeals as against 208 in 1927. The total number of appeals pending in the District Courts increased from 4,980 to 5,566.

CRIMINAL JUSTICE

The Judicial staff employed in the Presidency on Criminal work consisted of 8 permanent and 2 temporary High Court Judges, 17 Sessions Judges, 3 Additional Sessions Judges, 4 Assistant Sessions Judges, 365 First Class Magistrates, 386 Second Class Magistrates, 234 Third Class Magistrates, 161 Sanitary Committees and Sanitary Boards and 253 Village Panchayats. In addition to these there were 19,672 Police Patils in the Presidency exercising powers under the Village Police Act. There were also 49 Benches of Magistrates inclusive of four in the City of Bombay constituted from 462 Honorary Magistrates.

There were 211,910 offences reported during the year, showing a decrease of 1,440 over the figure of 1927. Of these 203,271 were found to be true. The number brought to trial was 199,507. Of these 796 cases affected human life, 269 being

murders. Eighty-three of these murders were from motives connected with women, 6 for the sake of ornaments, 30 for the sake of gain and 150 arising out of other causes.

The number of cases brought to trial during the year in the Courts of the Presidency Magistrates was 22,561 and in those of the Honorary Presidency Magistrates 80,597 making a total of 103,158. This number is less by 7,706 than that of 1927 when the corresponding figures were 22,385 and 88,479 making a total of 110,864. The number of cases under Special and Local laws was 92,801 or 7,343 less than that in 1927, whereas cases under the Indian Penal Code fell from 10,720 to 10,357. The decrease under the former head was most marked in offences under the City of Bombay Police Act which fell from 50,988 to 42,518. The number of offences under the Motor Vehicles Act rose from 2,201 to 2,347.

The aggregate number of persons under trial before the Presidency Magistrates was 117,497. Of the persons tried, 14,598 were acquitted or discharged; 100,226 were convicted; 167 were committed to the High Court. The results of the trials before each of the three classes of Presidency Magistrates are interesting. In the case of Stipendiary Magistrates the percentage of convictions was 56·9; Benches of Honorary Magistrates 96·0 and Honorary Magistrates sitting singly 96·1. Of the persons convicted 7,955 were punished with imprisonment, 84,023 with fine, 26 with whipping, 7,125 convicted persons were warned and discharged, 61 persons were sent to the Leper Asylum at Matunga and 913 were released on probation of good conduct. The sentences of imprisonment not exceeding 15 days were passed in 5,021 cases; not exceeding 6 months in 2,551 cases and not exceeding 2 years in 383 cases. The fines imposed aggregated to Rs. 4·22 lakhs.

The aggregate number of persons dealt with by the Mofussil tribunals was 142,108. Of these, the cases of 769 persons were committed or referred to the Sessions and the cases of the remaining 141,339 persons were finally disposed of by the various tribunals. Of the total number of cases disposed of 48·9 per cent. were convicted and 50·8 per cent. were acquitted or discharged. Eighty-four persons died, 326 escaped during their trials and 80 were transferred. The number of persons awaiting trial at the end of the year was 11,759 as compared with 9,796 in 1927.

Courts of Session.—There were 1,928 persons before the Courts of Session under trial. The cases of 1,712 persons were

decided. Of these 901 or 52·6 per cent. were convicted and 748 or 43·7 per cent. were acquitted or discharged. Death sentence was imposed on 25 persons ; transportation or penal servitude on 131 persons ; imprisonment on 758 ; fine on 201 ; whipping on 11 and 26 persons were ordered to give security.

One hundred and thirty-seven cases in all were brought to trial at the High Court Sessions during the year including three pending at the end of the previous year. Of these 126 were decided and 11 remained pending at the close of the year.

The total number of Criminal Appeals for disposal before the High Court was 670. Of these 596 were decided during the year leaving 74 at its close. The Sessions Courts dealt with 2,320 persons in appeal cases.

Sind

CIVIL AND CRIMINAL JUSTICE

The Sind Judiciary exercises jurisdiction over an area of 46,506 square miles with a population of 3,279,377.

There was a slight increase both in Civil and Criminal work in the year under report. The arrears of work, particularly Civil Appellate and Original, in the Judicial Commissioner's Court are still heavy. But to relieve the Court of some of the petty civil work, the Karachi Small Cause Court, with higher pecuniary jurisdiction, has now been established under the Karachi Small Cause Court Act (Bombay Act IV of 1929). The proposal to transfer the mofussil work of the Karachi District outside the Karachi Taluka to the Hyderabad Judicial District has been sanctioned by Government with effect from 1st December 1928, by creating a new district called the Tatta District and including it in the Hyderabad Judicial District and Hyderabad Sessions Division. These measures will relieve the Judicial Commissioner's Court to some extent.

The total number of civil suits instituted in Sind during the year was 38,029 as compared with 34,418 in 1927, showing an increase of 3,611. The value of suits filed was Rs. 153·82 lakhs. The number of suits disposed of and pending at the close of the year was 38,005 and 10,122 respectively as against 34,094 and 9,486 in the previous year.

As regards criminal work the number of offences reported and those returned as true during the year under review were 38,218 and 36,394 respectively, and show an increase of 4,276 and 4,088 as compared with the figures of the preceding year. There was a corresponding increase in the number of cases brought to trial from 33,484 to 37,052 and in the number of

persons under trial from 54,004 to 60,022. The number of persons remaining under trial at the end of the year increased from 6,110 to 6,995. The total number of persons under trial before the several Criminal Courts, including the Court of the Judicial Commissioner, was 60,613, out of which 28,785 were convicted, an increase of 5,638 over the previous year. Twenty-four persons were sentenced to death, 62 to transportation, 5,200 to imprisonment, 23,136 to fine, 175 to whipping and 678 persons were ordered to furnish security. The fines in 1928 amounted to Rs. 2·76 lakhs as against Rs. 2·54 lakhs in 1927.

The number of offences affecting life and attempts at such offences rose from 274 to 395 in the year under report. A large portion of this class of crime arose from intrigues or supposed intrigues with women.

The total receipts of all the Courts were Rs. 11·13 lakhs and the total charges Rs. 13·10 lakhs disclosing a deficit of nearly Rs. 2 lakhs. The deficit, as in 1926 and 1927, is mainly due to the fact that the cost of the new Judicial Court Buildings at Karachi is debited against receipts. The buildings have now been completed and occupied.

REGISTRATION

The total number of registrations during the year was 307,842 against 298,913 in 1927. The increase is attributed to devastation by floods, failure of crops and activities of Co-operative Societies. The number of documents relating to immovable property rose from 292,011 in 1927 to 300,977 in 1928. But the average value per transaction declined from Rs. 1,110 in 1927 to Rs. 992 in 1928, which indicates that property is still falling in value. Registrations relating to movable property slightly declined from 4,861 in 1927 to 4,756 in 1928. Tagavi Bonds rose abnormally from 3,568 in 1927 to 15,551 in 1928. The increase was due to grant of tagavi in the area affected by flood and in connection with a land improvement scheme in Bijapur.

The number of Registrations of Co-operative Societies' documents increased from 6,821 in 1927 to 11,599 in 1928.

The number of documents returned by post rose from 223,016 in 1927 to 228,316 in 1928. The system is very popular with the public.

There were in all four prosecutions. One of the accused was acquitted; one was released on probation and the others were convicted.

The Photo-copying system worked satisfactorily. Seventy per cent. of the documents registered in the Bombay Sub-Registry Office were copied by this process.

In spite of the increase in the number of registrations the gross income of the Department declined from Rs. 12,01,000 in 1927 to Rs. 11,83,000 in 1928, or by 1·5 per cent. which was due to the fall in the aggregate value of the property affected, while the total *pro-forma* expenditure decreased from Rs. 7,38,000 to Rs. 7,29,000 or by 1·2 per cent.

JOINT STOCK COMPANIES

During the year under report, 95 new companies were registered as against 74 in the previous year. Of these 88 were limited by shares—35 public and 53 private companies—and seven limited by Guarantee, having no share capital. "Though there has been some rise in the registration of new companies as compared with last year's figures, this cannot be taken as a sign of trade revival, since out of the excess of the number of the companies registered this year over those of last year, 13 are private companies; and the new public companies are, from their nature, not likely to exert any appreciable influence on the growth of trade," says the Registrar of Companies. "The mill strikes and the riots in Bombay have greatly disorganised the mill industry and probably on this account, the number of new Cotton Mill Companies is only 6 for the year as compared with 11 in 1927-28". The paid up capital of the existing companies rose to over Rs. 100 crores.

The total number of existing companies at the close of the year was 857 being an increase of 50 over the number in the previous year.

Twenty-five companies incorporated outside British India established places of business in this Presidency during the year as against twenty-two in the year preceding.

The number of societies registered under the Societies Registration Act XXI of 1860 was 53 as against 47 in the preceding year.

The number of documents of various classes registered during the year was 3,304 as against 3,134 in the preceding year.

One company and a liquidator were prosecuted for contravening the provisions of the Act and were fined. One Provident Insurance Company and its directors were also prosecuted and the case is pending.

The revenue realised in fees and by sale of forms amounted to Rs. 43,200 and the expenditure to Rs. 38,000.

CHAPTER IV

POLICE AND CRIME

THE Police force consists of two distinct bodies stipendiary and the village police. The stipendiary force is divided into grades, the members of which beginning as Constables on a monthly pay of Rs. 19 in Southern Division, Rs. 20 in Northern and Central Divisions and Rs. 21 in Sind have the opportunity of becoming Head Constables, Sub-Inspectors, Inspectors and even Deputy Superintendents. In the mofussil—

The Sub-Inspector has charge of the Police Station,
the Inspector has charge of a Circle comprising several Police Stations or a large Town, and
an Assistant Superintendent of Police or a Deputy Superintendent has charge of a Sub-Division of a District.

The pay of a Sub-Inspector ranges from Rs. 75 to Rs. 160 and that of an Inspector from Rs. 180 to Rs. 300 per mensem. The whole staff of the Police Prosecuting Inspectors and Sub-Inspectors is now designated as "Police Prosecutors" and their pay ranges from Rs. 90 to Rs. 400 per mensem. The pay of a Deputy Superintendent of Police ranges from Rs. 200 to Rs. 800 per mensem.

It is not the purpose of Government to give the stipendiary police a regular military character, and a portion only are armed, and to them are allotted the duties of guarding jails and lock-ups and the escort of prisoners and treasure. The more purely police functions are discharged equally by members of the armed and of the unarmed branches of the force.

The proportion of police to area and population of the different portions of the Presidency varies greatly, being determined by a consideration of the nature of the country, the density and character of the population, and the neighbourhood of Indian States.

In the Northern Range there is one policeman to every 4 square miles and to 737 inhabitants.

In the Southern Range 1 to 5·31 square miles and to 926 inhabitants.

In Sind 1 to 9·19 square miles and to 627·51 inhabitants. Of the total police force, excluding officers, 1,177 were mounted.

For the purpose of control in the Presidency proper the whole force is under the Inspector-General of Police, who is

assisted by three Deputy Inspectors-General of Police. Certain administrative powers have, however, been reserved to the Commissioners of Divisions.

The executive management of the police in each district is vested, under the general direction of the Magistrate of the District, in a Superintendent of Police, who is assisted by a Deputy Superintendent, and has in some cases one or more Assistant Superintendents under him.

Railway Police.—A special police organisation exists in connection with the railways of this Presidency—the North-Western which traverses Sind, the B. B. & C. I., the G. I. P. and the M. & S. M. Railways. The police employed along these lines of rail are under the supervision of three Superintendents. The Railway Police form a distinct body quite independent of the Police of the districts in which they serve, but their pay and prospects are identical with those of the District Police. Since the year 1919 the cost of the " Crime and Order Police " is wholly debited to the Provincial Revenues and that of the " Watch and Ward Staff " is borne by Railway Administrations.

Criminal Investigation Department.—In addition to the police attached to individual districts there exists a special organization for the detection of crime called the Criminal Investigation Department, which includes the Finger Print Bureau and is under the immediate control of a Deputy Inspector-General of Police. The Criminal Investigation Department, in co-operation with the Police of other provinces, is employed in the prevention of the spread of serious crime, in the investigation into crime having ramifications over several jurisdictions and in the pursuit of criminals. The Finger Print Bureau has been working satisfactorily since its establishment in 1901.

MOFUSSIL POLICE

" The year was marked by a very welcome fall under all important heads of crime, viz. reported, serious and true crime disposed of. There was also some improvement in the percentage of property recovered. The continued rise in non-cognisable crime is a disturbing feature in that it brings with it an increase of duty in the service of summonses. When, as was again the case this year, the Police had to be kept below strength to effect the necessary savings in the budget, a yearly increase of work of this character must be regarded with disquietude." Thus sums up the Inspector-General of Police

one of the salient features of police administration in the Presidency proper for the year 1928.

Another outstanding feature of the year was the quasi-political agitation known as the Bardoli Satyagraha in the Surat District. This led to a campaign of civil disobedience which seriously interfered with all branches of the local administration with the result that the Police had to be reinforced from other districts and were called upon to undertake many unwonted duties. These they carried out with tact and patience of no mean order in the face of unpopularity of a most depressing character which refused them the purchase of the ordinary necessaries of life and denied them the hire of a roof over their heads. In spite of these difficulties the Police performed their duties loyally and efficiently and their services during this critical time are worthy of warm commendation.

The year was also marked by serious communal disturbances. This type of unrest shows no sign of diminution. At Godhra the increasing bitterness which had manifested itself for some time culminated on the 18th September in a serious outbreak of communal feeling. At Surat Hindu-Muslim rioting broke out during the Ganpati procession on the 28th September. At Samgamner in Ahmednagar District the Hanmant Jayanti car procession brought a renewal of the Hindu-Muslim trouble. At Nasik and at Khed in Ratnagiri District minor disturbances of a communal character took place. Tension continued to prevail at Sholapur where serious trouble had occurred in previous years but, owing very largely to the entertainment of a strong force of additional police, no serious breach of the peace took place, and hooliganism by one or the other party was kept in check.

Generally speaking, the political situation was quiet throughout the year, except for a certain amount of agitation arranged when the Simon Commission arrived in October last.

The total number of cognizable and non-cognizable offences reported during the year was 110,850 as against 105,224 in 1927, an increase of 5,626 cases under all classes. The total cognizable cases dealt with by the Police *suo motu* stood at 27,491, whereas those dealt with by Magistrates direct amounted to 9,269 giving a total of 36,760 as against 38,735 in the preceding year a decrease of 1,975 cases. The total non-cognizable crime stood at 74,090 as against 66,489 in 1927, an increase of 7,601 cases. Cognizable crime reported to the Police under the Indian Penal Code (classes I to V) for the year under report was 20,384 against 21,519 in the preceding year. The total of all

reported cognizable crime for the Presidency excluding Sind (classes I to VI)* was 27,491 against 29,219. These figures indicate an appreciable fall, viz., by 1,728 cases (under all classes) as compared with the preceding year. Districts which have shown the most marked decrease in reported crime under the Indian Penal Code are Poona (547) and Dharwar (321). In Poona this is ascribed to the running down of a number of gangs of criminals who had been a nuisance in previous years and also to the fact that a number of habitual house-breakers were arrested during the latter months of 1927 and were still in Jail during the year under report. The decrease in Dharwar is attributed to the more reasonable registration of crime in Hubli town, where during the past three years crime had been magnifide by splitting up cases and registering as so many different offences what was really only one case, to the introduction of a better patrolling scheme and to the preventive action taken under certain sections of the Criminal Procedure Code. Among the other districts showing a moderate fall in reported crime under the Indian Penal Code is Satara. This district is noteworthy for its consistant progress towards law and order in the last six or seven years. Eight or nine years ago its reported crime was double what it is now. The chief cause of trouble was the Ramoshis. Since the Criminal Tribes Act was applied to this tribe and the more notorious of their members were sent to settlements, there has been a steady decrease in crime. In contradistinction to Satara, reported crime in the Bombay Suburban District is steadily on the increase. This year an increase of 114 cases is reported and this is the only district in the Presidency where any marked increase is shown. The reason is not far to seek, says the Inspector General. Suburban development is proceeding apace and year by year conditions there are approximating more to those of residential areas in Bombay City but without a corresponding increase of protection from the growing crowd of undesirables and from bad characters from Bombay City. The district has already outgrown the increase of police strength which was considered necessary in 1925 and recently sanctioned.

* *Class I*—Offences against the State, Tranquillity, Safety and Justice such as those relating to Army and Navy, Coin, Stamps, Currency Notes, etc.

Class II—Connotes serious offences against the person, *i.e.*, murder, culpable homicide, rape, unnatural offence, kidnapping, hurt, grievous hurt, etc.

Class III—Serious offences against person and property or against property only, *i.e.*, dacoity, robbery, mischief, house-breaking, house-trespass, etc.

Class IV—Minor offences against the person such as wrongful restraint and confinement, rash act, compulsory labour.

Class V—Minor offences against property, including theft, criminal breach of trust, cheating, receiving stolen property.

Class VI—Offences under Special and Local Laws, against religion, etc.

The number of cases reported under the more important heads of crime were murders 348 against 342 in the preceding year; attempts at murder and culpable homicides 151 against 116; dacoities 150 against 164; robberies 430 against 524; house-breaking 5,141 against 5,681; thefts (including cattle thefts) 8,110 against 8,494; receiving stolen property 386 against 407. The figures show an appreciable decrease of 1,012 cases as compared with the figures for 1927. The only type of crime showing an increase is that relating to offences against the human body. Under this head there was an increase of 41 cases over the last year and the Districts of Kaira, Surat, Ahmednagar, Satara and Belgaum chiefly contributed to this increase. Reports of offences against property with violence (dacoity and robbery) were less by 108 than in 1927. Reports of house-breakings decreased by 540. This was shared by both Ranges—Northern and Southern. In cases against receivers of stolen property there was a drop of 24 cases, which was obviously due to the heavy fall in the number of thefts. The latest figures from other Presidencies and Provinces show the following incidence of cognizable crime per thousand of population for the year 1927: Burma 4·06; Central Provinces 2·71; North West Frontier Province 2·24; Punjab 1·99; Assam 1·55; United Provinces 1·55; Bombay Presidency Proper 1·45; Bengal 1·28; Bihar and Orissa 1·08 and Madras 1·07. Burma continued to be the most, and Madras the least, criminal, while Bombay stood stationary.

Attached to the police report is a statement showing the incidence per 1,000 of population of reported crime classes I to V and serious crime in this Presidency, district by district. The figure for the Presidency (excluding Sind) for total crime has fallen from 1·45 in 1927 to 1·37 and for serious crime from 1·06 to 0·99. The blot on this otherwise satisfactory picture is the Bombay Suburban District which stands out from the rest with a figure of incidence of 6·8 for all Penal Code cases and 4·63 for serious crime.

The total number of cognizable police cases for disposal was 32,507 against 33,842 in the preceding year. The number of cases excluded as false or due to mistakes of law or fact was 5,682 as against 5,955 in 1927. The percentage of cases excluded to cases for disposal stood at 17·47 against 17·59 in the previous year. Of the excluded cases mentioned above, 837 cases were classed as maliciously false as against 810 in 1927. The total amount of compensation awarded for vexatious complaints was Rs. 5,252 as against Rs. 3,103 in the year before.

Four thousand and ninety-three cases were pending at the close of the year under report as against four thousand seven hundred and twenty-eight in the previous year. Eliminating 'excluded' and 'pending' cases the real cognizable crime disposed of during the year amounted to 22,654 cases as against 23,080 in 1927.

The total number of undetected cases was 7,064 against 7,185. Out of 14,629 cases decided by trial, 13,584 ended in conviction as against 14,199 out of 15,067 cases tried in 1927. Thus the percentage of cases convicted to those tried was 92·85 against 94·23 under all classes and 90·02 as against 91·56 under the Indian Penal Code. The cases before the Sessions Courts were 759. Of these 629 were tried and 468 ended in conviction. The percentage of cases ending in conviction to cases tried was 74·40.

The total number of offences under special and local laws dealt with by the Police numbered 7,694 against 8,174 in 1927. Of the 7,694 cases, 6,634 were brought to trial ending in the conviction of 6,375. The percentage of cases ending in conviction to cases tried was 96·09 against 97·47 in 1927.

The number of true cases dealt with by Magistrates without the intervention of the Police was 9,269 against 9,516. Of these 5,404 ended in conviction giving a percentage of 58·30 to cases tried.

The total number of persons arrested by the Police *suo motu* was 27,577. Inclusive of the cases pending from the previous year, the total number of persons for disposal was 33,032 as compared with 32,937 in the previous year. Of the total number of persons for disposal 26,114 were tried of whom 17,998 were convicted, giving a percentage of 68·92 on the total tried against 69·63 in the year before.

Reported non-cognizable crime rose from 66,489 in 1927 to 74,090 in the year under report. The number of persons concerned in non-cognizable cases who appeared before courts was 118,493 as against 109,053 in 1927. Seven thousand one hundred and ninety-five persons were discharged without trial, 81,590 were tried of whom 53,454 were convicted and 28,136 were discharged or acquitted. The percentage of persons convicted to those tried and of persons convicted to those who appeared before the courts was 65·51 and 45·11 respectively.

The value of property stolen during 1928 in connection with cognizable cases was Rs. 10·46 lakhs against Rs. 10·20 lakhs. The value of property recovered was Rs. 2·85 lakhs as compared with Rs. 3·12 lakhs in 1927. The percentage of property

recovered to property stolen was 38·87 against 38·09 in the previous year.

The total number of persons proceeded against under the preventive sections dropped from 1,572 to 1,388, a decrease of 184. During the year 3,227 out of 17,998 persons convicted were identified as having been previously convicted, and 892 were classed as " habitual offenders " against 2,730, 18,482 and 740 respectively in 1927.

" The short sentences which are more often than not meted out to these pests serve no useful purpose," says the Inspector General. " It appears to be a common idea among Magistrates that the amount of punishment should be measured by the value of property stolen. If a pickpocket acquires only Rs. 5 he gets a light sentence. If he happens to hit on a packet of jewels in someone's pocket his sentence is heavier. This takes no account of the fact that an habitual of this type lives by preying on society and it is only a bit of luck that he is caught on an occasion when the proceeds of his offence are small. The public needs to be protected from such people by their being put away for as long as possible."

In addition to the licensing and supervising of public conveyances and escorting prisoners and many lakhs of treasure, the Police served 207,104 summonses and warrants, extinguished 1,218 fires, destroyed 59,531 stray dogs, enquired into 1,170 cases referred to them by the magistracy and into 22,771 petty cases under the Cantonment, Public Conveyances and other minor Acts, 882 suicides, 5,255 accidents (503 on Railways) and 696 suspicious or sudden deaths ; 5 military deserters were also apprehended by the Police.

" The situation as regards the number of summonses and warrants served by the Police has eased somewhat in the last three years," continues the Inspector General. " The very heavy increases of twelve and thirteen thousand which took place in 1924 and 1925 and evoked comment in the annual reports for those years were followed by a slight fall in 1926 and the last two years have shown only a moderate increase of about 5,000 each year. The figures of non-cognizable crime for the same years have been examined in relation to this question and it does not appear that the rise or fall in this class of crime has such a direct bearing on the increase or decrease in the service of processes as was formerly believed. Nevertheless any further large increase is likely to embarass the Police and the time is not far distant when an increase of strength will be necessary or

some extension of the experiments of service through Patels still in progress in certain districts will have to be made."

One of their duties which is annually casting an increasingly heavy burden on the Police is that of the licensing and control of public motor conveyances. Public motor traffic is now firmly established on all the main routes in the Presidency and wherever roads are possible for motors and offer the prospect of profitable enterprise, the motor bus is in evidence. The number of public motor vehicles licensed during the year was 4,742.

"The general control of public motor traffic throughout the Presidency is a problem calling for early solution. At present each district has its own particular fancies in the shape of local regulations relating to details in amplification of the Public Motor Vehicles rules. These may in some cases be necessary but these variations do not tend to smooth the path either of the enterprising owner who wishes to ply his buses for hire in different districts or for the agents of the motor trade who have to vary their goods according to local official requirements. Again, the provision of adequate and convenient stands for public buses in some of the more populous towns is a matter which calls for early attention. More road patrols properly equipped to supervise and control running traffic are also urgently required."

The total strength of the Police was 710 officers and 17,357 men as against 704 and 17,305 in the year before. The total cost of the Police including the Railways in the Presidency proper and inclusive of the clerical staff for the financial year 1928-29 was Rs. 96·05 lakhs as against Rs. 96·59 lakhs in 1927-28, a net decrease of Rs. 54,315.

The proportion of Police to area, population and cognizable crime investigated was 1 policeman to 4·57 square miles, 2·38 railway miles, 821 persons and 1·51 cognizable crime investigated, as against 1 to 4·60 square miles, 2·30 railway miles, 820 persons and 1·56 cognizable crime investigated in the year before. In England and Wales the proportion was 1 policeman to 1·00 square miles and 648 persons for the year 1927. In Scotland, however, the proportion worked out to 1 policeman to 4·37 square miles, and 750 persons for the same year, *i.e.* 1927.

SIND POLICE

There was a slight decrease of 42 in the number of reported cognizable offences, the figures having fallen from 11,529 to 11,487. In the previous year a decrease of six was recorded. The more noticeable cases were the decreases of 156 in the Thar

Parkar district, 114 in the Upper Sind Frontier district and 128 on the Sind Railways. Better economic conditions in the Upper Sind Frontier district have contributed towards the decrease. In the Thar Parkar district the reason is uncertain, but on the Sind Railways better supervision by Railway Officials and a modified system of patrols are probably responsible for the improvement. Against these decreases there was an appreciable increase in the Sukkur district of 244. " In spite of the absence of facilities to the public for reporting crime, occasioned by the abolition of outposts and police stations, a large increase in the number of reported cognizable offences is recorded in this district, which is the most criminal in Sind and the most under-staffed," says the Commissioner in Sind in reviewing the Report of the Police Department in Sind. " The strengthening of the Police force in the Sukkur district is at the present time the most urgent need of all the innumerable needs of the Police department."

The percentage of cases excluded to cases reported rose from 24·98 to 25·31, the highest on record for the quinquennium ending 1928, though the number of excluded cases dropped from 3,578 to 3,545. The number of cases declared to be maliciously false was 619 as against 606 in the previous year. Prosecutions were undertaken in 137 cases but the percentage of convictions obtained dropped from 64 to 59·38, which however is appreciably above the percentage in 1926 when it was only 45·74.

The incidence of reported crime per 1,000 of population is 3·39 which, compared with that of other Provinces, places Sind again second in India. The Deputy Inspector-General of Police concludes his remarks by pointing out that Sind, with an area considerably more than half as large as the Presidency Proper and with a population one-fifth as large, has to deal with an amount of crime equal to roughly one-half that of the Presidency Proper, with a Police Force equal to only 29 per cent of that sanctioned for the Presidency.

The number of true cases under the head " murders and cognate offences " dropped from 281 in the previous year to 263. Decreases in the figures of true crime are also noticed under all heads except dacoities and robberies. Under these heads the figures of crime increased from 11 and 71 to 12 and 75 respectively. The figures of true crime considered with the figures of reported crime seem to indicate that there was some slight falling off in crime in the year under review.

The percentage of stolen property recovered fell from 34·99 to 33·32; but the percentage of complainants who received

back their property increased from 53·02 to 54·12. Property valued at Rs. 5¼ lakhs was stolen in 1928 as against Rs. 6 lakhs in 1927.

There was a small decrease in the percentage of cases ending in conviction, including Class VI cases, to cases tried. The percentage dropped from 78·53 to 78·41. There was, however, a slight improvement in the percentage of cases ending in conviction to real cases disposed of, the percentage having increased from 39·41 to 42·65. Further, an improvement is also noticed in the percentage of persons arrested by the police and convicted to those tried—the percentage rose from 43·79 in the previous year to 46·21 in 1928. In the Sessions Courts the percentage of convictions to cases tried rose from 70·69 to 74·41. The highest percentage was obtained on the Sind Railways where it reached 100 per cent and was closely followed by the Thar Parkar district where it reached 96 per cent. It was only 40 per cent in the Karachi district, which is the lowest.

The number of persons arrested by the Police was 12,395 against 11,901 in 1927. Inclusive of cases pending from the previous year, the total number of persons for disposal was 16,061 as compared with 15,687 in 1927. Out of 11,140 persons disposed of by trial 5,148 or 46·21 per cent were convicted, 439 were released by the Police and 3,648 were pending trial at the end of the year.

The number of pending cases increased from 2,323 to 2,551. Appreciable increases are noticed in the Hyderabad, Sukkur and Nawabshah districts. Cases pending with Magistrates increased from 1,860 to 1,988 and with the Police from 463 to 563.

Since 1925 there has been a steady decrease in the number of persons proceeded against under Chapter VIII, Criminal Procedure Code. If the number of cases dealt with under sections 109 and 110 only are taken into consideration, the decrease is more noticeable. There has been a drop from 1,617 in 1925 to 801 in 1928, that is to say, the total is only half of what it was in 1925, and if the figures are a reliable guide, this has had no adverse effect on crime. An examination of the results shows that, taking into account completed cases only the percentage of persons required to give security increased from 52·6 to 53·25. In Police cases the percentage of persons ordered to give security dropped from 61·7 to 59·06 and in Magistrates' cases the percentage increased from 21·00 to 37·91 which, in the case of the latter, is a very marked improvement.

The total strength of the Police Executive Force including Sind Railways at the end of 1928 was 5,226 as against 5,239 in the preceding year.

BOMBAY CITY POLICE

" The year was a very hard one for the Police," says the Commissioner of Police, Bombay, in his annual report for the year 1928. " There were strikes in several mills in the early months of the year and on the 16th April a strike began in the mills which in the course of a week developed into a general mill strike. It lasted till the 4th October. On the 23rd April the strikers became so violent in the Kalachowki area that it was necessary for the Police to open fire ; one man was killed and one wounded. After the general strike came to an end, there was a succession of lightning strikes numbering in all 97 in different mills till the end of the year. On the 12th December during one of these strikes serious rioting took place on Suparibag Road ; the Police had to open fire ; 4 rioters were killed and 18 injured, 30 policemen were also injured. On the 8th December a strike began in the oil companies which lasted for some months. All ranks from the Superintendent downwards were heavily overworked in the mill area and the grant of leave had to be curtailed, but they did their job efficiently and in spite of the physical discomforts to which they were constantly subjected, they did it cheerfully and uncomplainingly." The heavy strain caused by the industrial unrest told on the health of the Police and sickness was on the increase. The total number treated at the Northcote Hospital was 3,950 as compared with 3,549 in 1927.

A series of cotton fires started in January in the cotton godowns at Sewri also constituted a feature of the year. A very large number of bales were burnt, the damage by fire and water amounting to several lakhs of rupees. The Police were no more successful in tracing the cause of these fires than they were in similar outbreaks in previous years.

Cognizable and non-cognizable cases reported during the year numbered 136,080 against 136,619 during the year 1927. There was, on the whole, a decrease of 539 cases as compared with the figures of the previous year. In the year 1927 there was a decrease of 2,056 as compared with the figures of 1926. The total number of cognizable cases of all classes reported to the Police during the year was 93,638 against 95,254 in 1927. Of these, under the Indian Penal Code there were 7,786 and under local laws 85,852. The total of Indian Penal Code Crime for the year was the lowest since 1911 and showed a decrease

of 542 cases over the previous year. There has been a reduction of 30 per cent in crime compared with six years ago.

Including the cases pending from the previous year, the total number for disposal was 94,732 during the year under report against 96,085 in the preceding year. The total number of excluded cases was 327 against 490 in 1927. The number pending at the close of the year was 1,249 against 1,050 in 1927.

Of the total cases 93,125 of all classes were classified as true. Of these, 84,685 resulted in conviction giving a percentage of 90·94 as compared with 91·96 in 1927 and 93·65 in 1926. The percentage of true cases to cases reported stands at 98·30.

The total number of cases remaining undetected at the end of the year was 3,748 against 3,779 in 1927 and 3,393 in 1926. The percentage of non-detection works out to 3·96 against 3·93 in 1927 and 3·52 in 1926.

There were 71 cases of murder and attempted murder including 16 cases pending from the preceding years against 65 in 1927. Of these, 18 ended in conviction, 11 in acquittal and 29 remained undetected. Of the 55 murders and attempted murders reported during the year, the victims in 30 cases were males, in 3, females, and in one case the victim was a child. The remaining 21 cases were of infanticide. The motive of crime in 8 cases was jealousy, in 3 cases gain and in 2 cases the motive was to evade arrest by the Police. In the 21 infanticide cases the motive was, apparently, the desire of the mother to conceal her shame. Of the remaining 21 cases, in 2 cases the motive could not be ascertained, in one case the accused committed suicide and laid a false charge of murder in his dying deposition. In no case of infanticide was a conviction obtained.

The offences under special and local laws dealt with by the police numbered 86,074 against 87,064 in 1927. Of these 81,594 ended in conviction. The bulk of these cases fell under the Bombay City Police Act, the Prevention of Cruelty to Animals Act, the Public Conveyances Act, and the Bombay Prevention of Gambling Act. Offences under the other local laws were comparatively few. Owing to financial stringency, no special Police staff has been sanctioned for the working of the Bombay Children Act and the Bombay Prevention of Prostitution Act, but as in the year 1927 a staff consisting of 1 Deputy Inspector, 2 Sub-Inspectors and 4 Head Constables were spared from the existing strength of the Force for this purpose. The work done by these is interesting. With a view to dealing with children residing in brothels and with prostitutes 50 notices were taken out under section 7 of the Bombay Children Act.

These notices concerned 58 children. In 28 cases the children were removed from the objectionable places by the parties concerned after time was given by the Juvenile Court and the notices were thereupon discharged. The remaining 22 cases were pending at the close of the year. The provisions of the Children Act are now well known to the brothel keepers and prostitutes with the result that very few minor children are now found in objectionable places except infants under 3 or 4 years and who cannot be removed from their mothers.

Under the Bombay Prevention of Prostitution Act, 65 cases were taken up, 35 cases being under section 3 (for soliciting) against 15 males and 20 females. Thirty-four of these ended in conviction and in the remaining one the accused who was an old woman was given the benefit of doubt and discharged. There were 17 cases under section 5 against pimps for living on the earning of prostitutes. Of these 7 ended in conviction, one in acquittal ; in one case the accused died shortly after the proceedings were instituted, while the remaining 8 cases were pending at the close of the year. Ten cases under section 6 for procuring in which 16 accused persons were involved were also dealt with. Three of these ended in conviction, one in acquittal, two were classified as mistake of facts and the remaining four were pending. There were three cases under section 7 for importing girls into Bombay for prostitution. These involved 5 persons—4 males and 1 female. Two of these ended in conviction and one was pending. Besides these cases, 9 girls were taken charge of from brothels on suspicion. Six of these were found to be over 18 years of age and hence no case was registered with regard to them. In one case the girl who was found to be about 17 years of age absconded from the Vigilance Association's Shelter whilst enquiries were in progress.

The Commissioner of Police this year makes a special mention in the Report regarding the suppression of gaming in Bombay City. "My reason for inserting a special paragraph," says the Commissioner, "is that the opinion prevails in some sections of the public that the Police do little or nothing to suppress gambling and even connive at it for their own profit, and I therefore think it desirable to give some details of the work done. Only those whose duty it is to enforce the law on gambling know the wile and the cunning of the gaming house keeper and the difficulty of obtaining evidence. There is not in my opinion one gaming house in Bombay that is operating with the connivance of the Police, and if anybody is

of the contrary opinion and is prepared to prove it I shall be happy to give him every assistance."

During the year 14 bucket shops and 109 other gaming houses were raided. As a result 57 persons in connection with bucket shops and 538 in connection with other gaming houses were arrested, resulting in the conviction of 72·41 per cent and 83·22 per cent respectively. The Police also dealt with 129 cases of wagering on horse races and 676 other cases of gaming in public places.

The total number of direct Magisterial cognizable cases was 20,629 against 20,059 in 1927. Of these 19,532 ended in conviction giving a percentage of 94·68. The total number of persons involved in these cases was 20,950, of whom 19,569 were convicted. During the year under report 94,513 persons were arrested by the Police exclusive of 1,402 under arrest at the close of 1927 against 96,294 in 1927 and 96,516 in 1926. Of these 88,057 were convicted. The percentage of conviction thus stands at 91·80 against 92·64 in 1927.

The total value of property alleged to have been stolen in police cognizable cases amounted to nearly Rs. 19 lakhs as compared with Rs. 10¾ lakhs in 1927. The total value of property recovered was Rs. 4·15 lakhs which gave a recovery percentage of 21·87 as compared with 25·55 in 1927 and 57·92 in 1926. "As pointed out in my last report," observes the Commissioner, "the recovery percentage for 1926 was exceptionally high which was mainly due to nearly the whole of the property involved in two important cases of criminal breach of trust having been recovered. As a striking contrast to this not a pie could be recovered in two important cases of criminal breach of trust involving Rs. 6¼ lakhs committed in one case by a Managing Director of a shipping company and in the other by the Managing Director of a bank."

Preventive action was taken by the Police under Chapter VIII of the Criminal Procedure Code against 23 persons as against 65 in 1927.

The distribution of licenses granted under the Arms Act is shown in the Report. New licenses granted during the year numbered 615 covering 997 weapons. At the close of the year there were 5,450 licensed persons possessing 8,209 arms which is an increase of 58 licensees over the year 1927.

The total number of motor vehicles running in the City during the year was approximately 11,800 including 900 motor lorries. There were 2,589 motor accidents or 150 more than in the previous year. Of this number 75 were fatal.

During the year 98 persons were killed and 2,315 persons were injured in street accidents as compared with 78 killed and 2,309 injured in the previous year. Of these killed, 11 were by tram cars, 75 by motor cars, 4 by hack victorias, 4 by other public conveyances and the remaining 4 by private conveyances other than motor cars.

The Commissioner comments on the delay in the disposal of cases in the courts. As pointed out in the previous year, there were 49 police cases in 1927 which had taken six months or longer for disposal. In the year 1928 there were 78 cases which took six months or longer to dispose of.

The total permanent strength of the Force at the close of the year stood at 3,928 as against 3,764 at the close of the year 1927.

The population of the City according to the census of 1921, is 1,175,914 and the proportion of crime to population on these figures stands at 1 to 12·60 as compared with 1 to 12·40 in 1927 and 1 to 12·32 in 1926.

The proportion of crime to each Police Unit stands at 23·77 as compared with 25·19 in 1927 and 24·92 in 1926.

VILLAGE POLICE

Under the provisions of Bombay Act VIII of 1867 the Village Police are subject to the control and direction of the Commissioner, administered by the different District Magistrates. It is their special duty to prevent crime and public nuisances and to detect and arrest offenders within village limits. They are not stipendiary, but receive perquisites from the inhabitants of the village or rent-free lands or small sums of money from Government. In each village the Village Police are under the charge of the police patel, who is often, but by no means always the person performing the duties of revenue patel. His duties as police patel are to furnish the Magistrate of the district with any returns or information called for, and to keep him constantly informed as to the state of crime and all matters connected with the Village Police and the health and general condition of the community in his village. Under a form of administration which preserves the village as the unit of collection in revenue matters, the institution of Village Police naturally holds an important place.

There are no village police in Sind, but in their place village or taluka trackers (paggis) are employed.

The Village Police rendered special assistance in 284 cases during the year as against 373 in the preceding year. Three hundred and sixty-seven village policemen were rewarded as

against 341 in 1927. Of these, 138 were rewarded by the grant of good service tickets and swords and the remainder by money rewards amounting in all to Rs. 1,910. On the other hand 596 village policemen were reported for neglect of duty against 520 in 1927. Of the former 520 were punished departmentally and 62, who were concerned in the commission of crime, were prosecuted, of whom 25 were convicted.

ADEN POLICE

The total number of officers and men of the Police including the clerical establishment was 322, of whom 12 were mounted. Only 93 were literate. The expenditure on the force was Rs. 2,08,482 of which Rs. 1,44,284 was borne by Government, Rs. 39,363 by the Aden Settlement and Rs. 24,835 by the Port Trust. Out of 319 persons concerned in 441 offences and sent up for trial 209 were convicted, 110 were acquitted or discharged. The percentage of convictions was 52·57 as compared with 62·93 in the preceding year. The value of property stolen during the year amounted to Rs. 24,260 of which property worth Rs. 5,100 was recovered. The conduct of the Police in general was fair. Two were dismissed, one discharged, four reduced, one fined and seventy were given extra drill. The strength of the Harbour Police was 54 men of all ranks. Two hundred and eleven persons were deported to Somaliland and 248 to the interior of Arabia at the expense of the Settlement, while 25 persons were deported to Mossawa, Bombay, Medi, Allula, Bunder Kassim, Khokha and Mokalla at Government's expense.

GOVERNMENT MALE AND FEMALE WORKHOUSES

By the European Vagrancy Act of 1874 a person of European extraction (which does not include "those commonly known as Eurasians or East Indians") found asking for alms or wandering about without any employment or visible means of subsistence is a "vagrant" and may be required by a police officer to appear before a Magistrate. If the latter thinks that the vagrant is not likely to obtain employment he sends him to a Government Workhouse known as the Working Men's Hostel, where he is kept. If the Magistrate is of opinion that the vagrant is likely to get employment in any other place in India he may at his discretion forward the vagrant to such a place.

If after a lapse of a reasonable time in a workhouse no suitable employment is obtainable for the vagrant, the local Government may cause him to be removed from British India at Government expense or may release him.

Penalties are provided by the Act for refusal to go before a Magistrate, for quitting the workhouse without leave, etc., two years' imprisonment being the maximum penalty for the latter offence.

The Government Male Workhouse is now administered by the Salvation Army, which receives a grant from Government. Destitute Europeans may go voluntarily to the King Edward's Home which is managed by the Salvation Army and also receives a grant from Government.

The total number of inmates in the Working Men's Hostel during the year ending 31st December 1928 was 107, out of which 80, as against 81 in 1927, were newly admitted. Seventy were sent by Magistrates in the Town of Bombay and 10 were sent by Magistrates in the Bombay Presidency outside the City of Bombay. The cost of running the hostel was Rs. 12,709 as against Rs. 11,284 in 1927. The average daily population during the year was 28·3 as against 24 in 1927, and the average cost per head was Rs. 449-1-3 per annum as against Rs. 470-2-8 in 1927. There was, however, an increase in the messing charges from Rs. 5,355 in 1927 to Rs. 6,446 in 1928, due to the increase in the daily average population.

Twenty-five vagrants deserted the hostel during the year. The maximum period of residence of an inmate who left the hostel was 1,273 days.

There were two female vagrants in the Female Workhouse at the close of the year 1927. During the year 1928 one female vagrant was admitted who remained in the workhouse from the 10th to the 19th April 1928, on which date she was sent to the Mental Hospital at Yeravda on the recommendation of the Medical Officer of the Arthur Road Prison. The total cost of maintenance amounted to Rs. 101-14-5 for the year 1928, the daily average cost being Rs. 2-3-10 as against Rs. 1-5-9 in 1927.

Bombay Jails

The annual report of the Bombay Jail Department for the year 1928 shows that there has been steady progress made in almost all directions by the department during the year under report. In the Presidency Proper the jail accommodation is now sufficient for the number of prisoners that may ordinarily be expected, but overcrowding of the Sind Jails is still a constant and disturbing feature. Though the financial situation in the Presidency was unfavourable during the year the Nasik Road Central Prison was almost completed, the Karachi District Prison was extended, and a considerable part of the buildings

of the Sind Convict Gang were reconstructed after the recent disastrous floods. It has not yet been possible however to make provision for other highly desirable improvements in particular, for the extension of the Hyderabad Central Prison and of the Larkana Sub-Jail. The need for more accommodation in the Sind Jails is recognised and will be provided for as soon as financial situation permits.

There has been no great change in the total daily jail population as compared with recent years. The average daily population in 1928 was 12,898 as against 12,979 in 1927 and 12,829 in 1926.

One hundred and forty-eight prisoners were specially released by order of Government as compared with 157 in the preceding year, while 4,802 prisoners were released under remission rules as compared with 5,015 during the preceding year.

There was a regrettable increase in the number of prisoners under 16 years of age. The figure, which was 70 in 1925, 57 in 1926 and 35 in 1927, rose again to 53 in the year under report. Twenty-three of these young offenders were awarded sentences of three months or less, 5 over three months to six months, 8 over six months to one year, and 17 over one year.

The total number of prisoners between the ages of 16 and 21 admitted during the year was 1,577 males and 81 females, as compared with 1,617 males and 85 females in the previous year. Two hundred and fifty-five of the male prisoners were sent to Dharwar Juvenile Jail as compared with 208 in 1927. The increase is attributable to the alteration of the rules whereby previously convicted prisoners are now eligible for admission. An increase in habituals was noticed. These numbered 4,017 as against 3 527 in the previous year.

DISCIPLINE

The number of cases of jail offences dealt with by Criminal Courts was 54 as against 48 in the previous year. Fourteen thousand two hundred and forty-five offences were dealt with by Superintendents as compared with 16,652 in 1927 and 17,332 in 1926.

The number of prisoners fettered for punishment or security again fell from 5,686 in 1927 to 5,188 in the year under report. Fetters as a punishment were imposed in 2,222 cases as compared with 3,094 in the previous year.

The number of floggings was 33 as compared with 18 in the previous year. The increase is almost entirely accounted for by the occurrence of two events in which corporal punishment had to be inflicted on an extensive scale so as to preserve discipline. The first one was at Yeravda Central Prison where a communal

fight took place in a barrack during the night and though no great harm was done owing to the prompt measures taken for its suppression it might have led to serious disturbances throughout the jail. The Superintendent had the ring-leaders flogged. At Shikarpur Special Prison a conspiracy was formed to attack a prisoner and the prisoners concerned in it were flogged.

HEALTH

There was a slight increase in the sick rate which rose to 19·3 per thousand from 17·9 in 1927, but the very low death rate of 8·6 per thousand which was recorded in 1927 was maintained during the year under report.

INDUSTRIES AND LABOUR

"Though extra mural labour is the most profitable way of employing prisoners, suitable work is difficult to be found," says the Inspector-General of Prisons, "and this was particularly the case in 1928." This mode of employing jail labour was therefore much restricted.

The average daily number of prisoners employed on Intra Mural manufactures was 4,170 as against 4,339 in 1927.

The average cash earnings of each prisoner was Rs. 25-1-0 as compared with Rs. 29-12-0 in the previous year and the average earnings per prisoner actually employed on jail manufactures fell from Rs. 60-9-0 to Rs. 55-7-0 in the year under report. The average net profit per prisoner sentenced to labour was Rs. 22-11-4 and per prisoner employed on manufactures Rs. 50-3-0 as compared with Rs. 25-0-8 and Rs. 50-15-0, respectively, in the previous year. The total net profit amounted to Rs. 2,32,557 against Rs. 2,58,143 in 1927. The fall in profits is attributable to general trade depression, increased quantity of manufactured goods supplied to Government departments on which the profit is small, completion of the Visapur Dam and reduction in the number of prisoners employed in Yeravda Prison Press.

FINANCE

The average gross cost of guarding and maintaining a prisoner was Rs. 137-14-9 as against Rs. 142-10-9 in the previous year whereas the average net cost after deducting profits was Rs. 120 as against Rs. 123 in the preceding year. Owing to favourable grain rates and increased experience in the system of departmental purchase the average cost of feeding prisoners fell from Rs. 60-1-6 to Rs. 54-14-9 a head.

The report acknowledges the work done by the various Released Prisoners' Aid Societies in the Presidency, and by those who have voluntarily given their services for the moral and religious instruction of prisoners.

Criminal Tribes

" The daily routine brings to notice mainly those settlers who have gone astray in greater or lesser measure, but taking a longer view the outlook is promising. There are abundant signs that many of the wandering tribes are settling down to live in one place and earn their living honestly. The number of settlers both from the wandering, and from those criminal tribes who had fixed homes formerly, who qualify for discharge on license is hopeful and the number of those who pass their period of license successfully and so qualify for absolute freedom from all restriction is equally cheering." Thus concludes an interesting report on the Working of the Criminal Tribes Act in the Bombay Presidency for the year 1928-29.

" The greatest need of the Department," says the Report, " is the opening of two small new settlements with larger adjacent agricultural colonies for the freed settlers of an agricultural type, one in the Southern Division and one in the Central Division. It seems a great pity that so many of the criminal tribes, particularly those from the wandering tribes should become town dwellers, when they love the open air life. There are many depopulated villages in the forests where such settlements could be established. The main receiving settlements are the Nira Projects Settlement and the Presidency Construction Settlement. These settlements are based on construction work of tank and canals, and are a very useful form of work for those criminal tribes, who need only be kept in a settlement for some years and then permitted to return to their homes after they have shown signs of reformation, but they afford no permanent solution for those settlers who come from the wandering tribes and have no home or village to which they can return if they are discharged from a settlement."

The population in the settlements as it stood on 31st March 1929 fell from 9,519 to 8,964 during the year. In the same period 111 registered persons with their 134 dependants making a total of 245 persons have been admitted into the various settlements on the recommendation of the Police. The reduction in the population as compared to last year is due to the number of families discharged on license. Most of these have been discharged to the free colonies attached to the settlements. The population of the latter has increased from

3,261 to 4,065 during the year. These free colonies represent the permanent disposal of the criminal tribes, especially the wandering tribes after their discharge from the settlement. Without such colonies, in many cases the discharge from settlements would be tantamount to forcing the persons to recommence their former habits of wandering and stealing, as they have no other home than that provided in the settlement to which they can go.

EMPLOYMENT

The rains of 1928 were satisfactory and employment normal. The majority of settlers were engaged as usual in Spinning and Weaving Mills, Workshops and Factories. Considerable difficulty was, however, experienced in securing employment for new persons in the mills as they had an abundance of labour. New arrivals from Bombay City and other districts were mostly sent to the Presidency Construction Settlement at Pimpalgaon Kunjhira, where the work is unskilled and under the control of the Settlement Department.

The settlers of Nira Projects Settlement have been engaged on one of the branches of the canal. It is expected that the work will be completed there by March 1930 and then the settlement will be moved to Mandanwadi where a dam estimated to cost Rs. 3,80,000 has to be constructed. These construction settlements have the great advantage of providing regular unskilled labour and so are specially suitable for the settler on his first introduction to settlement life, but they have the disadvantage that the settlement has to be moved every few years on completion of the work. Another drawback to them is that they provide no permanent solution for the settler who has no suitable home to go to, when fit for discharge from the settlement. For such cases transfer to an industrial settlement in a town or to an agricultural settlement is essential so that on release in the former case he may live on the free colony and retain his work in the town, or in the latter case he may take up agricultural work, some waste cultivable land being sought out for him.

HEALTH

The health of the settlers has been satisfactory. There were no serious epidemics during the year, but in the Nira Projects Settlement at Dhalewadi the settlers suffered from an epidemic of malaria. The settlement at Hubli had 20 cases of plague of which only three proved to be fatal—one was a child, one a doubtful case of plague and in the other case was of a settler who had avoided inoculation. The wholesale inoculation of the

settlers and other measures had the desired effect. In Hubli town 795 persons died.

EDUCATION

"Compulsory education is made a reality in the settlements," continues the Report. Attendance is compulsory in the day school in the case of both boys and girls up to the age of 13, and also for the children working in the mills as long as they are half timers. Attendance up to the age of 18 years in the night schools is enforced for the boys who have left the day schools and serves not only the purpose of maintaining literacy, but also gives contact and control at a very important period of the boy's life. The number of children attending day or night schools per thousand of the population is 236·8 for the settlements and 227·6 for the free colonies. Special attention is paid to manual training. This can be judged from the number of boys who left school after training. Fifteen were trained in masonry, 53 in carpentry, 6 in tailoring, 23 in agriculture, 4 in weaving, 2 in printing, 10 in electrical works and 2 in blacksmithy.

The settlements maintain Boy Scout troops. The number of boys in the settlement troops at the end of the year was 795.

CONVICTIONS AND ABSCONDERS

During the year 213 persons from the settlers or members of the free colonies were convicted in 214 cases compared with 212 persons convicted in the previous year in 166 cases. The majority of cases were under the Criminal Tribes Act where there has been a rise, *i.e.*, 146 cases involving 147 persons as against 97 cases involving 111 persons. The number of absconders was 115.

DISCHARGE FROM SETTLEMENTS

During the year 177 registered persons with their 531 dependants have been discharged on license from the settlements to the free colonies attached to the settlements. Moreover 103 registered persons with their 234 dependants have been allowed to return on license to their villages, thus making the total number of persons discharged from settlements 1,045.

SPECIAL ESTABLISHMENTS

The Women's Home attached to Hubli settlement has continued its beneficent work. The Children's Homes and Hostels established in Baramati, Sholapur, Bijapur and Hubli closed the year with 99 children.

The total expenditure on the settlements during the year was Rs. 3,18,000.

CHAPTER V

AGRICULTURE, WEATHER AND CROPS

THE agricultural season of 1928-29 though not as satisfactory as its predecessor was fairly good, on the whole, at least in a large part of the Bombay Presidency. The most characteristic feature of the season was the frost wave which swept over Sind and the northern half of the Presidency proper at the end of January and the beginning of February. This caused considerable damage, chiefly to fruit trees in Sind, to rabi crops in general and cotton and early sown wheat in particular in Gujarat, and to sugarcane on the Pravara and Godavari Canals in the Deccan. A large portion of the grape crop in the Nasik District and of fruits and vegetables in the North Deccan was also lost as a result of the frost.

Area under cultivation.—In the Presidency proper, the gross cropped area decreased by 48,000 acres. The most noticeable decrease (—43,000 acres) occurred in the Ahmedabad District due to deficiency of rains in June and October. The other districts where the gross cropped area showed a substantial decline were Bijapur (—14,000 acres), Thana (—11,000 acres), East Khandesh (—9,000 acres) and Ahmednagar (—6,000 acres) and here the decrease was due to either the deficiency or the unsuitability of the sowing rains. Against this, Dharwar (+ 18,000 acres), Poona (+ 12,000 acres) and Kolaba (+ 10,000 acres) showed an appreciable increase due to the good September rains in the two former districts, *viz.*, Dharwar and Poona, and the good rains in July in the last-named district, *viz.*, Kolaba.

The area cropped twice showed a decrease of 42,000 acres in the Bombay Presidency proper. In Gujarat the decrease amounted to 24,000 acres, in the Deccan to 41,000 acres and in the Karnatak to 10,000 acres, being in all cases due to general deficiency of the late rains. Against this the Konkan showed a rise of 33,000 acres, mostly in the Thana District, due to the good rains that were received in the Division in October, followed by some fair rain even in November.

The net cropped area showed a slight decline of 6,000 acres in the Bombay Presidency proper due to deficiency or unsuitability of the sowing rains in some parts.

In Sind, the gross cropped area and the net cropped area showed a slight decline of 99,000 acres and 153,000 acres or 2·2 and 3·7 per cent. respectively owing to absence or deficiency of rains in the kharif season which caused a decrease in the cropped area in the desert portions of the Karachi and Thar Parkar Districts. The area cropped more than once, however, showed an increase of 63,000 acres due to the good inundation of the season which lasted up to October.

Cultivated and Uncultivated Area

(Area in thousands of acres)

Details	Presidency proper			Sind		
	1928-29	1927-28	Increase (+) or decrease (—) per cent.	1928-29	1927-28	Increase (+) or decrease (—) per cent.
A—Cultivated Area	Acres	Acres	Per cent	Acres	Acres	Per cent.
Gross cropped area ..	28,958	29,006	—0·2	4,483	4,583	— 2·2
Area cropped more than once ..	873	915	—4·6	455	402	+ 13·2
Net area cropped ..	28,085	28,091	....	4,028	4,181	— 3·7
Current fallows ..	5,443	5,452	—0·2	5,374	5,318	+ 1·1
Assessed ..	33,328	33,342	....	8,988	8,831	+ 1·8
Unassessed ..	200	201	....	414	668	— 38·0
Total cultivated area..	33,528	33,543	....	9,402	9,499	— 1·0
B—Uncultivated Area						
Available for cultivation (Culturable waste) ..	862	890	—3·1	5,957	5,936	+ 0·4
Not available for cultivation { Forest	8,493	8,516	—0·3	747	743	+ 0·5
Not available for cultivation { Others	5,841	5,775	+ 1·1	14,069	13,992	+ 0·6
Total uncultivated area..	15,196	15,181	+ 0·1	20,773	20,671	+ 0·5
Total area ..	48,724	48,724	....	30,175	30,170	....

NATURE OF THE CROPS

About two-thirds of the cultivated area of the Presidency is devoted to growing food-stuffs, jowar, bajri, rice, wheat and gram being the most important crops. Cotton is the largest non-food crop.

In the Presidency proper, the area under *food crops, i.e.*, cereals, pulses, sugarcane and fruits and vegetables, decreased by 555,000 acres or 2·8 per cent. below the previous year and by 61,000 acres or 0·3 per cent. as compared with the average. Among the kharif crops, bajri showed a decline of 545,000 acres or 11·9 per cent., rice of 60,000 acres or 3·0 per cent. and kharif jowar of 34,000 acres or 0·5 per cent. below the preceding year due to the deficiency of the June rains in North Konkan, North Deccan and almost the whole of Gujarat. The rabi crops, on the other hand, showed a general rise over the previous year due to the good rains received in September and October throughout almost all the rabi area of the Presidency. Thus, wheat showed an increase of 170,000 acres or 11·5 per cent. and gram of 21,000 acres or 3·7 per cent. over the areas occupied by these respective crops in the preceding year, *viz.*, 1927-28.

The area under *non-food* crops which comprise tobacco, cotton and oil seeds, increased by 507,000 acres or 5·6 per cent. over the previous year and by 2,100,000 acres or 28·2 per cent. as compared with the average. The most noticeable increase was under groundnut (+ 259,000 acres) among oil seeds and under cotton (+ 191,000 acres) due to the popularity of these crops and the suitability of the rains. Tobacco also showed a rise of 31,000 acres over the previous year owing to the good rains in Gujarat from July onwards.

The net result of these variations in the food and non-food crops was a decrease of 48,000 acres or 0·2 per cent. below the total cropped area of the previous year although there was still a rise of 2,039,000 acres or 7·6 per cent. as compared with the average.

In Sind, with the exception of jowar and bajri the area under which was curtailed to the extent of 16,000 and 156,000 acres or 2·7 and 13·7 per cent. respectively below the previous year, in favour of better paying crops like cotton, rice and wheat, the area under almost all the crops rose over the previous year. Thus, rice showed a rise of 40,000 acres or 3·5 per cent., wheat of 13,000 acres or 3·5 per cent., gram of 13,000 acres or 8·0 per cent. and cotton of 123,000 acres or 46·5 per cent. above the last year partly due to the incentive of high prices fetched by these crops and partly due to the good inundation of the season.

BOMBAY, 1928-29

Cropped Area

(Area in thousands of acres)

Crop	Presidency proper			Sind		
	1927-28	1928-29	Percentage by which area in 1928-29 exceeds (+) or falls short of (—) that in area in 1927-28	1927-28	1928-29	Percentage by which area in 1928-29 exceeds (+) or falls short of (—) that in area in 1927-28
I—Food Crops	Acres	Acres	Per cent.	Acres	Acres	Per cent.
(*a*) Cereal and pulses						
Jowari ..	7,220	7,186	— 0·5	602	586	— 2·7
Bajri ..	4,590	4,045	— 11·9	1,135	979	— 13·7
Rice ..	2,013	1,953	— 3·0	1,138	1,178	+ 3·5
Wheat ..	1,479	1,649	+ 11·5	396	409	+ 3·5
Gram ..	572	593	+ 3·7	168	181	+ 8·0
Others ..	3,862	3,698	— 4·4	315	283	— 10·1
Total cereal and pulses ..	19,716	19,124	— 3·0	3,754	3,616	— 3·7
(*b*) Sugarcane ..	65	61	— 6·2	3	3	..
(*c*) Other food crops* ..	188	229	+ 21·8	50	54	+ 8·0
Total Food Crops ..	19,969	19,414	— 2·8	3,807	3,673	— 3·5
II—Non-Food Crops						
(*a*) Tobacco ..	116	147	+ 26·7	8	6	— 25·0
(*b*) Oilseeds ..	1,443	1,627	+ 12·7	312	306	— 2·0
(*c*) Cotton ..	4,611	4,802	+ 4·1	265	388	+ 46·5
(*d*) Other non-food crops†	2,867	2,968	+ 3·5	191	110	— 42·4
Total Non-food Crops ..	9,037	9,544	+ 5·6	776	810	+ 4·4
Total Crops ..	29,006	28,958	— 0·2	4,583	4,483	— 2·2

* These include fruits and vegetables and miscellaneous food crops.

† These include 'condiments and spices,' 'dyes,' drugs and narcotics excluding tobacco which has been separately noted, 'fodder' and miscellaneous non-food crops.

Variations in the principal crops were as follows :—

Jowar and Bajri.—The area under jowar and bajri in the Bombay Presidency proper fell below the last year as well as below the normal due to the absence or deficiency of rainfall in June in Gujarat and the North Deccan and in August in South Deccan and the Karnatak.

In Sind, the decline in area under both the crops below the last year and the average, in spite of the good inundation of the season, was due partly to the failure of rains which were responsible for the decrease in area under these crops in the desert

portion of the Karachi and Thar Parkar Districts and partly to the cultivators being induced to utilise the good inundation to the cultivation of more profitable crops like rice and cotton.

Rice.—The area under rice in the Bombay Presidency proper fell by 60,000 acres or 3 per cent. below the previous year, almost the whole of this decrease occurring in the Gujarat Division due to the absence of rains there in June.

In Sind, on the other hand, the area rose by 40,000 acres or 3·5 per cent. due to the good inundation coupled with the incentive of the high price fetched by the grain.

Wheat.—The area under this crop rose over the previous year both in the Presidency proper and in Sind by 170,000 and 13,000 acres respectively.

Oilseeds.—The area under oilseeds in the Bombay Presidency proper expanded by 184,000 acres or 12·7 per cent. over the previous year and 741,000 acres or 84·5 per cent. when compared with the average.

In Sind, on the other hand, the area under oilseeds diminished by 6,000 acres or 2·0 per cent. below the previous year and by 51,000 acres or 14·3 per cent. as compared with the average.

Groundnut.—When during 1927-28 the area under the crop rose to 7½ lakhs of acres from 6 lakhs of acres in 1926-27 and 1925-26 and 3½ lakhs of acres in 1924-25 and 1923-24, it was thought that the maximum limit of cultivation had probably been reached. The very great advance during the year under review of over 2½ lakhs of acres since the preceding year (1927-28) shows that this is not the case. How far the area under the crop will go on increasing will of course depend on the market prices and the character of the seasons during the next few years. In the Deccan, the area under groundnut rose from 550,000 acres in 1927-28 to 756,000 acres during the year under report. In the Karnatak, the area was about 50,000 acres more than in the preceding year. The increased cultivation under groundnut is, in fact, one of the most striking agricultural changes in recent years.

Cotton.—The cultivation of cotton showed an extension of 191,000 acres or 4·1 per cent. over the previous year and 1,942,000 acres or 67·9 per cent. when compared with the average, as more area was brought under cultivation of this crop on account of the high prices fetched by cotton in recent years and also owing to the favourable rains in June in the South Deccan and in September in Gujarat and the Karnatak. The increase in area was general except in the North Deccan where the area receded due to the deficiency of the rains in June.

In Sind, as might be expected from the favourable nature of the inundation, the area under this crop extended in all the three cotton growing districts of the Province, *viz.*, Hyderabad, Thar Parkar and Nawabshah, the total increase amounting to 123,000 acres or 46·5 per cent. over the previous year and to 144,000 acres or 59·0 per cent. when compared with the average.

Sugarcane.—The area under this crop fell by 4,000 acres from 65,000 acres in 1927-28 to 61,000 acres during the year under report. The decrease mostly occurred in the Ahmednagar District of the Deccan owing to the deficiency of water-supply and to the slump in the price of *gul*. In Sind, the area under sugarcane remained almost the same as during the previous year.

Tobacco.—The area under the crop increased by 31,000 acres or 26·7 per cent. over the previous year in the Bombay Presidency proper, most of the increase occurring in Kaira and Belgaum.

Irrigated Area

In the Bombay Presidency proper, the area irrigated showed a rise of 35,000 acres or 3·6 per cent. over the previous year, having risen from 965,000 acres during the previous year (1927-28) to 1,000,000 acres during the year under report.

In Sind, similarly, the irrigated area increased by 140,000 acres or 4·7 per cent. over the preceding year having increased from 2,983,000 acres in the last year (1927-28) to 3,123,000 acres in the year under consideration (1928-29).

(Area in thousands of acres)

Details	Presidency proper			Sind		
	1928-29	1927-28	Increase (+) or decrease (—)	1928-29	1927-28	Increase (+) or decrease (—)
A—Area Irrigated	Acres	Acres	Per cent.	Acres	Acres	Per cent.
Irrigated from Government canals ..	240	210	+ 14·3	2,995	2,837	+ 5·6
Irrigated from Private canals ..	72	84	— 14·3	13	11	+ 18·2
Irrigated from Wells ..	540	513	+ 5·3	48	55	— 12·7
Irrigated from Tanks ..	121	105	+ 15·1	..	2	..
Irrigated from other sources ..	27	53	— 49·1	67	78	— 14·1
Total Area Irrigated ..	1,000	965	+ 3·6	3,123	2,983	+ 4·7

(Area in thousands of acres)

Details	Presidency proper			Sind		
	1928-29	1927-28	Increase (+) or decrease (—)	1928-29	1927-28	Increase (+) or decrease (—)
B—Crops Irrigated						
Rice	198	190	+ 4·2	1,178	1,139	+ 3·4
Wheat	168	176	— 4·5	280	247	+ 13·4
Barley	12	12	..	5	8	— 37·5
Jowari	212	201	+ 5·4	540	461	+ 17·1
Bajri	45	49	— 8·2	413	572	— 27·8
Maize	23	21	+ 9·5	4	3	+ 33·3
Other cereals and pulses	103	87	+ 18·4	184	157	+ 17·2
Sugarcane	61	64	— 4·7	3	3	..
Other food crops ..	130	134	— 3·0	81	64	+ 26·6
Cotton	34	24	+ 41·7	389	265	+ 46·8
Other non-food crops ..	154	146	+ 5·5	215	191	+ 12·6
Total B—Crops Irrigated	1,140	1,104	+ 3·3	3,292	3,110	+ 5·9

Note.—The difference in totals A and B is due to the inclusion in the latter of the area cropped more than once.

Outturn of Crops

(Outturn in tons of Food-grain Crops)

Division	Area in thousands of acres			Outturn in thousands of tons		
	1926-27	1927-28	1928-29	1926-27	1927-28	1928-29
	Acres	Acres	Acres	Tons	Tons	Tons
Gujarat	2,549	2,486	2,325	759	674	734
Deccan	10,748	10,980	10,713	1,956	2,366	2,103
Karnatak	4,619	4,643	4,488	720	889	993
Konkan	1,551	1,607	1,598	663	710	686
Total Bombay Presidency proper ..	19,467	19,716	19,124	4,098	4,639	4,516
Sind	3,782	3,754	3,616	904	811	905
Grand Total ..	23,249	23,470	22,740	5,002	5,450	5,421

Both the area and outturn of food-grains in the Presidency proper fell below that of the last year. The area receded by 3·0 per cent. and the outturn by 2·7 per cent. thus showing

that the season under review was slightly less favourable than its predecessor.

In Sind, on the other hand, while the area fell somewhat (by 138,000 acres or 3·7 per cent.) below the previous year the outturn rose appreciably, from 811,000 tons to 905,000 tons or 11·6 per cent., thus depicting the favourable nature of the season due to the excellent inundation of the year.

CONDITION OF THE AGRICULTURAL POPULATION

The season under review was fairly good both in the Presidency proper and in Sind and there was no actual scarcity of food and fodder in any area.

As the combined result of the peculiarities of the season and of the variations in prices and wages, the cultivator of rabi crops in general and of cotton and tobacco in particular suffered rather heavily in Gujarat owing to these crops having been reduced in quantity as well as quality, as a result of the frost. Similarly, the Deccan Canal irrigator on the Godavari and Pravara Canals sustained a serious loss on his sugarcane crop as a result of the frost. Except for these special cases, however, the condition of the agriculturist was, on the whole, fairly satisfactory almost everywhere in the Presidency inclusive of Sind.

DEPARTMENT OF AGRICULTURE

AGRICULTURAL RESEARCH AND ITS APPLICATION

The year under report was on the whole a good one, both in the Presidency proper and in Sind, where the inundation of the river was quite satisfactory. The outstanding climatic feature of the year was the frost wave which swept over Sind and the northern half of the Presidency proper at the end of January and beginning of February. This was so intense that in times to come the year 1928-29 will probably be referred to as the great frost year. The temperature at Sakrand (Sind) fell to 20°F on the 1st February 1929, or ten degrees lower than the normal. Temperatures almost as low prevailed for several days, and rabi crops, such as early sown wheat, suffered severely. Fruit trees and jungle trees such as Babul, Salvadora Persica and Caparis Aphyla sustained great damage.

In Gujarat the severe cold lasted from the 30th January to the 2nd February 1929.

In the Deccan the most alarming consequences of the frost were in connection with the sugarcane crop on the Godavari

and Pravara Canals, and growers estimated the damage at 80 per cent.

It is satisfactory to note that the Department of Agriculture was able to render useful services to cane-growers by advising them what to do in the circumstances through the deputation of a chemist for two months who worked out and demonstrated the proper procedure to adopt in making gul from immature cane.

Other crops in a tender stage also suffered and in particular the Nasik grape crop was destroyed.

Seed-supply.—The largest seed-supply-operations undertaken by the Department are in connection with the cotton crop. In the Surat area the Department has introduced the well-known hybrid cotton known as 1027 A.L.F. Each year the Department arranges with certain groups of villages to produce seed, under supervision, sufficient to sow about a lakh of acres, and the seed from this area becomes spread through the whole tract. Similarly the improved strain of Kumpta cotton known as Dharwar I has been introduced on a large scale in the Karnatak, where the Hubli Co-operative Sale Society has been the chief instrument for supplying seed on a large scale. The Department has, however, produced an almost equally good cotton called " D1 × D2 " which has the important advantage of being wilt-resistant, and it is proposed to make this cotton the standard variety for the Dharwar tract. In the Gadag tract Dharwar-American cotton is the variety commonly cultivated and the improved strain known as Gadag I is being widely introduced. The area sown in the year under report with this variety of seed supplied by the Department or other reliable agency was 139,396 acres. In Khandesh the principal variety so far introduced has been " N.R." an improved strain of deshi. The seed-supply in this tract has not been so well organized as at Surat, Dharwar and Gadag. Only comparatively small quantities of seed are handled by the Department and this is supplied to Taluka Development Associations. The Department has been successful in breeding an improved cotton suitable for cultivation in Khandesh. This cotton has been given the name of " Banilla " and the area sown with it in the year under report was 2,872 acres and arrangements have been made to distribute seed for 25,000 acres in 1929-30. This cotton spins 18s to 20s counts against " N.R." which spins only 10s counts so that it has a far-reaching significance to the Khandesh tract. In Sind the improved strain of deshi known as " 27 W.N." has reached an area of about 60,000 acres while early American

cotton is finding much favour in the Southern Jamrao tract, where the canal has recently been working favourably in the early sowing season. As a consequence the area under 4 F. Punjab-American was 35,471 acres against 33,090 acres sown with deshi cotton in the year under report. Turning to wheat the most successful work has been in connection with the introduction of " Pusa 12 " into Upper Sind.

Seed of improved strains of rice are now being distributed in several centres. Thus in the North Konkan the variety known as Kolamba No. 42 has been widely introduced, and the Department issued seed for 3,300 acres in the year under report. Another popular strain in the North Konkan is known as " Kolamba No. 79 ". The Department in the year under report issued seed for 150 acres of this strain. In Kanara the Department has introduced two improved strains. The improved strains of rice which have been bred on the Larkana Farm are now being issued in the district. In the year under report the area sown with them was 247 acres. Improved strains of rice bred at the Mugad Farm in the Dharwar District are undergoing final trials before being distributed to the public. The improved tobacco strain bred at Nadiad and known as " No. 6 " is proving very popular in the Kaira District. Seed sufficient to sow 800 acres was issued in the year under report.

Grading seed.—Very striking results have been obtained from merely grading rabi jowar seed in the Deccan, and a great deal of work has been done with the object of helping cultivators to adopt this very simple but very valuable improvement. Thus in Sholapur District 90 plots sown partly with graded and partly with non-graded seed were arranged.

The increased yield from graded seed has varied from 30 to 89 per cent. against 26 to 73 per cent. in 1927-28 in the case of the dry crop and from 43 to 77 per cent. against 16 to 25 per cent. in the case of the irrigated crop. The grading is done by hand sieves and 574 of these sieves were sold, and now many cultivators have adopted the practice. In this district about 3 lakhs of lbs. of rabi-jowar seed were found to have been graded, while in the Barsi taluka alone it has been ascertained that the method has been adopted in 13 villages to the extent of 12 per cent. of the total rabi-jowar area.

Field Embankments.—There are few more popular services rendered by the Department of Agriculture than the work of the " bunding " officers who teach cultivators the right methods

of aligning and constructing "tals" or field embankments. There are now four such officers wholly employed on this work.

In order to spread correct knowledge among cultivators on the construction of these embankments a class was organised at Barsi for a week in January 1929. The cultivators much appreciated the instructions imparted in this class which was well attended.

Diversification of crops.—Owing to the unsatisfactory nature of the sugarcane industry in recent years the Department has been giving special attention to the diversification of crops in the canal zone which in the past has depended too much on sugarcane. The two most promising money crops are early cotton and early groundnuts. The "N.R." variety of cotton is proving very successful as an irrigated crop.

The area under this cotton is increasing on all the canals owing to the facilities for early water granted by the Irrigation Department.

The most suitable variety of groundnuts is Spanish peanut, and the Department distributed 18,840 lbs. of seed of this variety in the canal tracts.

Reducing "costs" of production.—Perhaps the chief defect underlying the sugarcane industry in the Deccan is the high cost of production. Cane-growers as a class over-manure their crops regardless of the law of "diminishing return". Thus the cost of producing a maund of stripped cane reaches 12 annas per maund (of 80 lbs.). So long as this order of magnitude in cost of production persists it is improbable that the Deccan can ever become a sugar-producing, as distinct from a gul-producing, tract. Efforts are accordingly being made by the Department to prove that cane can be produced much cheaper. In this connection figures have been worked out which have considerable significance and represent the average results obtained by adopting the "standard Manjri-system", which embodies many economics at the Manjri Experimental Farm. It is anticipated that it will be found possible to reduce costs still further by substituting the variety known as J 213 for the local Pundia variety. These economics have been widely demonstrated in the canal tracts and several of the items are being adopted by cultivators.

Crop Protection.—The Department of Agriculture is now in a position to assist the cultivator in a variety of ways in protecting his crop from sundry pests. First of all there are the great fungus diseases such as smut in jowar. In the Southern Division upwards of 30,000 packets of copper

sulphate were distributed, mainly through the services of the Revenue Department. In Kanara District the Supari palms are subject to a serious disease called Koleroga. Spraying operations were conducted by the Department in 45 villages in gardens covering 300 acres, and in addition 28 demonstration plots and 12 training classes were organised, while spraying machines to the number of 12 and spraying materials to the value of Rs. 800 were sold to garden-owners. Insect pests cause an immense amount of damage to crops. One of the most troublesome pests in recent years has been the wingless grasshopper which has raided the Deccan from Nasik to Dharwar for several years. This pest was so formidable in some of the Nasik villages that bajri cultivation had to be given up. A very successful method of destroying this pest has been devised by the Department which may be called the "tin-sheet" method. This was demonstrated on a large scale in Nasik, Satara and Dharwar districts and the results were very successful.

Control of Thrips.—Thrips have been found to be most troublesome to Chillies and Onions, especially the latter. So the problem of controlling these was taken in hand. Certain experiments were made but it was eventually decided to suspend work in this direction until the life-history of the pest has been studied.

Jowar-Borer at Surat.—Apart from the question of alternative host plants the main sources for carrying over the pest to the next season are the stored Kadbi and Stubbles. Experiments on an extensive scale have determined that these sources give out the maximum number of moths in the month of July. The knowledge gained so far thus shows that the possibilities of checking the pest lie mainly in creating a complete close season and in extending it as far as possible. The first point can mostly be achieved by preventing the escape of moths from the Jowar stubble and Kadbi and the second can be achieved by putting in the new crop as late as possible. The method of dealing with the stubble is early removal accompanied by complete exposure to sun heat, while that of dealing with Kadbi will be either chopping or complete covering of Kadbi stacks.

Mechanical Assistance.—The Department is constantly approached for advice and assistance in connection with the purchase and erection of machinery.

Boring.—The Department of Agriculture has been assisting the public for over 20 years to increase the water-supply in their wells and a recent computation showed that 187,790 feet

Dusting mango plantation in Konkan against mango hoppers and mildew. [*Facing page 70*

had been bored and about 3,000,000 gallons per hour had been added to the wells of the Presidency. In the year under report there were 24 boring machines working under the direct control of the Agricultural Engineer and 28 machines working under the five Presidency Deputy Directors of Agriculture. Altogether 254 bores were made resulting in the tapping of 65,706 gallons of water per hour.

Horticultural Assistance.—Interest in fruit-growing is widespread throughout the Presidency as is evidenced by the fact that 738 enquiries regarding fruit cultivation were received in the course of the year from the public. The district horticultural staff has been very fully occupied in assisting owners of fruit trees to improve their property, for example in the budding of country bor trees and the grafting of country mango trees, the treatment of orange orchards for " die-back " disease and the control of grape mildew by sulphur dusting.

Cattle Improvement and Shows.—The most important cattle-breeding farm is called " The Northcote Cattle Farm, Chharodi " (Ahmedabad) where the cattle belong to the Kankrej breed. Some splendid animals were exhibited at the Presidency Show at Ahmedabad in November 1928. Some of the cows on this farm are now yielding over 4,000 lbs. of milk per lactation. The best animal " Ravati " yielded 5,866 lbs. in 414 days, while " Meghan " yielded 4,889 lbs. in 336 days. At the Willingdon Cattle Farm at Phihai near Karachi the breed is " Sindhi Red " the most famous milch breed in Asia. In the year under report one cow yielded 7,500 lbs. per lactation, two cows yielded 7,000 lbs., three cows 6,000 lbs. and ten cows 5,000 lbs.

Propaganda carried out in villages aims at elimination of the scrub bulls and use of pedigree bull bred on cattle-breeding institutions or in approved localities, where pure breeds of cattle are bred.

The quality of the calf sired by the pedigree bull has been a decided improvement over that of its country dam and has demonstrated to the breeder the value of good bulls.

The total number of premium bulls on active service in the different parts of the Presidency is 98. The number of services per bull should average to 50. Taking an estimate of 40 calves per bull, the total improved stock born to these bulls during the year under review is calculated at about 4,000 heads.

Shows.—The number of fairs and shows has been on the increase. The Presidency Show, the District Shows and the Taluka Shows were adequately represented by the cattle-

breeders. A number of shows pertained purely to cattle and the one at Athni (District Belgaum) was held on a large scale. A considerable number of typical cattle were exhibited, and there was a spirit of friendly rivalry and competition. These shows serve as a medium for effecting cattle sales.

Poultry.—Poultry farming is faring very well; but there has been a set-back to the business due to a wholesale outbreak of contagious disease in birds in several parts of the Deccan. A large number of stud cocks was distributed in the country for grading the local fowls. The graded fowl has proved a better layer than the country one. There is a big demand for eggs in Bombay market and a scheme to organise units for egg-marketing is under consideration.

Sheep-breeding.—The experiment of placing 12 grade Merino rams in selected centres in the Deccan for improvement of the country sheep for fleece and mutton has not yet proved conclusive. The results of successive generations have to be carefully watched.

AGRICULTURAL RESEARCH

Future plans.—One of the great services of the Royal Commission on Indian Agriculture was to place research in its proper place in the activities of the Department of Agriculture. During the past 20 years there have been very few agricultural officers of standing in any of the Provinces of India, who were free to devote their whole energies to research. The exigencies of circumstances required most of the staff of the Departments to deal with education, propaganda and administration as these activities could not be left undone if the public were to be impressed by the Departments of Agriculture.

The launching of the Imperial Council of Agricultural Research marks a fundamental step forward. Henceforward it is expected that there will be a corps of talented scientists devoting themselves wholly to research undistracted by teaching and other time-absorbing duties. It is anticipated that there will soon come into being a Bombay Provincial Committee of Research to collaborate with the Imperial Council, and plans are already being made to prepare schemes for the consideration of these bodies.

In the Presidency proper one of the greatest problems demanding real fundamental research, is Deccan Irrigation which at present is a burden on the general tax-payer. A well-equipped Agricultural Research Station to deal with this problem is overdue. It has been suggested that this Station

should be located somewhere on the Right Bank Nira Canal, the latest and largest irrigation work of the Deccan. In the meantime, pending an improvement in the finances of this Presidency, it seems desirable to set up in skeleton form a Deccan Agricultural Research Institute, if not in bricks and mortar at least in men. The Imperial Council of Agricultural Research is willing to support any well-thought-out scheme and accordingly proposals are being worked out on these lines.

Plant-breeding.—In Sind certain strains of wheat namely "C. Ph. 47" and "A. T. 38" have proved to be very prolific in this respect surpassing Pusa 12; but the fact is being kept steadily in view that the future wheat of Sind should, if possible, be such as to command a world-market and be comparable to the best Canadian wheats, and experiments are now in progress with Manitoba wheat to ascertain whether it can be acclimatized or at least utilized as a parent in hybridization work. At Larkana certain high yielding strains of rice have been evolved, and attention is now being paid to the question whether, under the new irrigation conditions, later varieties possessing higher quality should be aimed at. In the Konkan a very desirable new strain known as "No. 401" has been bred at Karjat. It possesses very fine grain which commands a good valuation. This variety may prove very useful for the substitution of the coarse varieties now grown on the high-lying fields. In the Karnatak the Department has been fortunate in breeding a hybrid cotton which has practically as good fibre properties as the well-known "Dharwar 1" but is strongly wilt-resistant. It is proposed to replace "Dharwar 1" with this new variety which is called "D 1 × D 2". In Khandesh the Department has bred a new cotton which is called "Banilla". This cotton spins 18s to 20s against the 10s of "N.R." a fact full of significance to Khandesh. It is expected that 25,000 acres will be sown with Banilla in 1929-30. Progress is also being made with tobacco-breeding at Nadiad, bajri-breeding at Poona, nagli-breeding at Ratnagiri and jowar-breeding in Sind. The highly important crop of rabi-jowar in the Deccan, which extends over 36 lakhs of acres, has not yet been tackled but it is next on the list.

Dry-farming.—The problem of conserving the rainfall still remains the master-factor in the improvement of agriculture over the greater part of the Presidency. Hence the research work of the Soil-Physicist has great significance. The methods worked out by that officer are now being tested on a large scale under cultivators' conditions, and there seems reasonable ground

to infer that some of his methods, which are practical under village conditions, do lead to a very substantial increase in yield.

Alkaline-soils.—The Soil-Physicist at Sakrand is investigating several aspects of the problem of alkaline salts in alluvial soils. In order to obtain fundamental data a careful soil survey has been made of the Sakrand estate, and it has been found that most of the area contains soluble salts ranging from 1 to 2 per cent. of the soil, while some portions contain as much as 7 to 8 per cent. Analyses indicate that the highest percentage of salt is usually contained in the top one-foot of the soil in cultivated land, while it gradually decreases with depth, but there are conspicuous exceptions to this rule. Sodium chloride and sodium sulphate are the predominant salts. The Agricultural Chemist at Poona has investigated the assimilation of plant-food by the rice-plant at Karjat and has published a bulletin under the title " Assimilation of food constituents by the rice plant." He is now turning his attention to the problem of " Karl lands " in the Karnatak which in the aggregate occupy such a large area and on which crop-growing is so difficult.

Plant-pathology.—In Plant-pathology good progress is being made in several lines of research. The substitution of sulphur dust for Bordeaux spray as a preventive of mildew on grapes has proved very successful, and the Nasik grape-growers are highly appreciative. The well-known process of steeping jowar-seed in copper sulphate is also being replaced by sulphur dust with excellent results. The Mosaic disease of chillies which devastates this crop all over the Deccan forms the subject of a very interesting piece of research. Wilt-disease in cotton is now assuming alarming dimensions in certain parts of the Presidency. A Research Scheme is in progress at Dharwar, financed by the Indian Central Cotton Committee. So far the most promising method of dealing with this disease is through breeding resistant strains of cotton and considerable progress has been made on these lines.

Plant-physiology.—The Indian Central Cotton Committee have provided funds to finance two research schemes connected with cotton-physiology. The first pertains to the shedding of the bolls of the cotton plant and is being conducted at Surat. Nitrogenous manures applied in such a way as to be effective at certain critical periods in the plant's life appear to have a marked effect in diminishing this shedding and consequently increasing the yield. This treatment is being tested on an extended scale. The other scheme is being conducted at

Sakrand, and it is designed to throw light on the extent to which the principal environmental factors affect the success of the crop and the best means of exercising control, where control is possible, as for example the quantity of irrigation water used and its method of application and the date of sowing.

Soil-fertility.—Maintaining the fertility of the soil in Sind under perennial irrigation with a negligible organic-manure supply, is a problem of immense importance. Experience shows that the land has a strong tendency under constant irrigation to deteriorate in physical condition, in other words to fall into bad "heart". This becomes intensified if alkaline salts are present. The cropping scheme presumed in the Lloyd Barrage Project Report does not appear to meet this difficulty, and accordingly the Agricultural Section at Sakrand is investigating alternative systems of agriculture designed to solve this problem.

AGRICULTURAL PROPAGANDA

The importance of well organized propaganda by the Department of Agriculture has long been recognised and this work is being steadily pushed on in practically every taluka of the Presidency. The various methods adopted have been fully described in previous reports but a new type of intensive propaganda may be referred to. At the suggestion of Mr. A. M. Macmillan, Collector of Ahmednagar, a plan has been worked out for conducting mass propaganda in his district in the ensuing year. The programme will be confined to three or four proved improvements such as seed-grading and dry-farming methods. These will be demonstrated on land at all important bazaar and market centres and officers will explain the advantages to be derived from their adoption on bazaar days. Propaganda in order to penetrate into every corner of the Presidency must be largely non-official. The chief non-official agency is the taluka development association.

These associations vary considerably in quality but many of them are doing good work.

SHOWS AND DEMONSTRATIONS

The second Presidency Agricultural Show was held at Ahmedabad in November 1928. In all important respects this Show was quite the equal of the first Presidency Show held in Poona in October 1926, while some sections taking advantage of Poona experience, were in advance upon their counterparts at the first Show. The Research pavilion was distinctly more impressive indicating the fact that the staff have made progress in devising ways and means of visualizing,

to the public, the meaning of research in agriculture. The same was true of the Pestology pavilion which however was unfortunately burnt down a few minutes before the Show was opened. The Rural Education Section afforded another example of marked advance on its predecessor. The more spectacular sections, such as the Engineering and Livestock Sections more than maintained their Poona reputations, while the Horticultural Section, which had to be organized under much less favourable conditions than at Poona, proved one of the great attractions of the Show. The attendance was also very satisfactory.

It is gratifying to report that several excellent District Shows, largely modelled on the Presidency Show-design but on a smaller scale, were also held during the course of the year. The most important were the Bijapur Show, the Ahmednagar Show, the Jalgaon Show and the Jacobabad Show. The Bijapur Show extended over three days and was attended by very large crowds. The special feature of the Ahmednagar Show was the demonstration plots in which crops were grown by improved methods and raised from graded seed. The differences in the appearance of the plots were very striking. At Jalgaon also the special feature of the Show was the Crop-Court. This Show was attended by 15,000 visitors. Tractor demonstrations were the special feature of the Jacobabad Show.

In addition to organized shows a very large number of demonstrations were conducted throughout the Presidency and Sind. Many of these were held in conjunction with the Jamabandi (i.e. settement of village accounts). Similarly a large number of demonstrations was conducted on cultivators' fields. Tractor demonstrations were organized in Sind on an extensive scale.

ENGINEERING

The new seed drill was exhibited at Ahmedabad Show, and many useful suggestions were received for its further improvement. These have now been tried and adopted where suitable. It is now being proposed to give a firm permission to manufacture this drill. The Agricultural Engineer has further perfected the winnowing machine, a recent test of which indicates that it can winnow 1,000 lbs. of Jowar bhusa per hour at a cost of 5 annas. The Presidency Show at Ahmedabad placed a very heavy burden on the Agricultural Engineer and his staff but the splendid form which the Machinery Section of the Show assumed, fully rewarded him for his efforts. Mention has been made of the popularity of the Oil Engine Class for which there were 78 applications from cultivator candidates.

There is now a demand from the trade that the Department should organize tractor classes to train drivers as the driver-problem is one of the biggest obstacles in the way of introducing tractor cultivation.

AGRICULTURAL ECONOMICS

Marketing.—The Royal Commission on Agriculture have made out a very convincing case for the appointment of a Marketing-Officer. There can be no question that marketing disabilities strangle the advancement of agriculture to an extent which cannot be exaggerated. This is well illustrated by the fact that the hybrid cotton " 1027 A.L.F." although it has been grown on an extensive scale, in a very fairly pure condition for many years, still fails to secure its intrinsic value.

Steps are being taken to introduce regulated Cotton Markets under the Bombay Cotton Markets Act of 1927. These regulated markets are designed to eliminate the abuses which have crept into the Kapas or seed-cotton markets in the mofussil and to ensure that the cotton grower shall receive all that he is entitled to. It is proposed to organize the Dhulia market on these lines in the first instance. One of the great obstacles which lies in the way of introducing improved strains of crops on a large scale, is the fact that growers entangle themselves with financiers in order to finance their " standing-crops " and thereby cease to be free agents with regard to the disposal of their produce.

There is a great need for devising ways and means for adapting Co-operative finance to the customs of the country, and more particularly accepting the " standing crop " as a security, if not from all at least from approved growers.

Statistics.—In accordance with a long-felt want and in consonance with the recommendation of the Royal Commission on Agriculture, proposals have been placed before Government to create a post of Statistician in the Department. Until this post is created it will be impracticable to reform the statistical work of the Department. That this is urgently required is clear from the highly unreliable forecasts which are at present prepared by District Officers.

AGRICULTURAL EDUCATION

The Poona College of Agriculture continues to be very popular. The number of applicants for admission in 1929-30 was 220, but 92 of these applications were rejected, mainly for lack of accommodation. The Principal points out that students from the landed aristocracy and sons of large

landowners now form a definite and growing group in the College. The number of candidates who appeared for the final examination for the degree of Bachelor of Agriculture held in March 1929 was 79, of whom 60 passed, one man securing a "first class."

Rural Education.—The problem of reorganizing the agricultural schools so as to make them less expensive and better adapted for the purpose in view, is receiving careful consideration. The general principle underlying such schools in some countries is that which may be called "earning while learning." If the sons of peasant farmers are to be attracted, it seems essential that they should not be a burden on their parents, particularly as the parents lose the labour of their sons, which is one of the chief reasons why children in this country are withdrawn from school before they complete the ordinary primary school curriculum.

The working of the six agricultural schools is as follows :—

Marathi	.. Loni (Poona District) 39, Dhulia (West Khandesh) 31 and Jambul (Thana District) 20.
Kanarese	.. Devi-hosur (Dharwar District) 26.
Gujarati	.. Godhra (Panch Mahals) 23 and Surat 31.

Bias Schools.—These schools are still struggling against certain inherent disabilites, *e.g.*, (1) there is no training school for the teachers, (2) there is a good deal of lack of sympathy among the lower personnel of those responsible for primary education and (3) control has passed into the hands of District Local Boards.

It seems that a scheme designed to reform village education should be organized on lines analogous to those adopted for reforming village finance. The counterpart of an active sympathetic officer, like the Registrar of Co-operative Societies appointed to foster the movement and remove obstacles, might achieve great results. The Inspector of Agricultural Schools continues to give the Educational Department and Local Boards as much advisory assistance as he can in conducting these schools.

FINANCE

The expenditure of the Department amounted to Rs. 18,28,300 during the financial year 1928-29 as against Rs. 17,08,600 in the previous year. The receipts amounted to Rs. 2,92,400 as against Rs. 2,59,700 in the previous year.

Subsidies were received from the Indian Central Cotton Committee to the amount of Rs. 1 lakh and Rs. 20,500 from the Sir Sassoon David Trustees.

NOTE ON THE WEATHER

I. The period, April and May 1928.—Only two of the four western disturbances that entered northwest India during the month of April were active. Continuous rain fell in Kashmir and the frontier hills between the 14th and 19th April when the third disturbance from the west was affecting the country. As a result of this it was reported that the Indus suddenly rose causing some damage to the Barrage works at Sukkur. Rainfall was in large defect over most of northwest and central India. It was in slight excess in the Bombay Deccan, in slight defect in Sind, in large defect in the Konkan and completely absent in Gujarat. Skies were less clouded than usual and maximum temperature was above normal in Sind. Humidity was in defect in the Bombay Deccan. The total rainfall of the month of May was in large defect in all divisions of the Presidency. Cloudiness was less than usual in the Konkan and the Bombay Deccan and humidity was in defect in the latter division alone.

II. The Monsoon period, June to September 1928.—The onset and activity of the monsoon were the outstanding features of the weather during the month of June. It appeared on the west coast on the normal date and was active in the Konkan and the Deccan, but weak over the rest of the Peninsula, Gujarat and the central parts of the country. The advance of the monsoon on the Malabar Coast was attended with squally weather over the southeast Arabian Sea between the 3rd and the 7th. It extended into the South Konkan on the 4th and into the Bombay Deccan on the next day; Mangalore had 4″ on the 4th, Marmagao 5″ and Karwar 13″ on the 5th. Extensive rain with thunderstorms also occurred in the Central Deccan on the 3rd. The Arabian Sea monsoon extended in the Deccan and into the central parts of the country on the 6th and also temporarily into the Punjab through Rajputana on the 8th. It was vigorous in the south of the Presidency between the 7th and 13th producing some noteworthy heavy falls; Ratnagiri had 7″ on the 7th, Sholapur 4″ on the 8th and Bombay 17″ in forty-eight hours between the 11th and 13th. But for a period of a week thereafter, the monsoon continued normally active in the Konkan. Rainfall of the month was in slight excess in the Konkan and the Bombay Deccan and in large defect in Gujarat and Sind. Maximum and minimum temperatures, humidity and cloudiness were normal in all

divisions. In July the monsoon was fairly active over the Presidency and the adjacent areas except in Sind. Heavy rains at the end of the month resulted in floods in parts of the Central Provinces and Gujarat and several breaches in Railway lines. The total rainfall of the month was normal in the Bombay Deccan, in slight excess in the Konkan and Gujarat and in large defect in Sind. Temperature and cloudiness were both normal in all divisions. Humidity was in defect in Sind.

The first half of the month of August was marked by a break in the rains over northwest India and the central parts of the country and the general feebleness of the Arabian Sea monsoon. The monsoon began to revive in the central parts of the country on the 16th August and gradually extended over northwest India. Towards the end of the month a depression formed in the Bay of Bengal and moving through the Central Provinces lay over east Rajputana on the 30th and over the Punjab on the next day. It caused vigorous monsoon in the Konkan, Gujarat and the North Deccan with a fall of 6″ at Bombay on the 27th and 5″ at Ahmednagar, and Rajkot on the 28th. It was also responsible for very heavy rain in Central India, Rajputana, the Punjab and Kashmir and consequent serious floods in the Punjab rivers. The total rainfall of the month was in slight to moderate excess in the Bombay Deccan and the Konkan, in slight defect in Gujarat and in large defect in Sind. Cloud amount and both maximum and minimum temperatures were normal. Humidity was lower than usual in Sind. During the month of September the monsoon was on the whole vigorous in the north and central Deccan and fairly active in Gujarat. There was a complete break of rains in northwest India during the last three weeks resulting in a seriously felt drought in that area. A shallow depression which appeared and persisted over Hyderabad between the 16th and 18th September extended the monsoon in the north and central Deccan and Gujarat. Malegaon had 3″ on the 17th and 18th and Bhavanagar 3″ on the 20th. Breaches in railway lines are reported to have occurred in several places in Gujarat owing to floods caused by heavy rains. The monsoon was again active over the north of the Peninsula during the last week. Rainfall of the month as a whole was normal in Gujarat, in moderate excess in the Bombay Deccan, in moderate defect in the Konkan and altogether absent in Sind. Other climatic conditions were normal except in Sind where humidity alone was in defect.

III. The Retreating Monsoon period, October to December 1928.—The month of October was remarkable for vigorous monsoon, rainfall being in very large excess in Sind and the Konkan and in slight excess in Gujarat and the Bombay Deccan. The weather in the province was again influenced by a depression during the last week. It appeared off the Konkan coast on the 23rd, as an aftermath of a storm which crossed the north Madras coast the previous evening, and moving in a northerly direction disappeared off the Sind-Kathiawar coast on the 27th. It caused an extension of rainfall along the west coast and in Sind, Gujarat and Rajputana. Skies were more clouded than usual in Sind and Gujarat. Humidity was in excess in the Bombay Deccan. Temperatures, night and day, were not far from normal. A noteworthy feature of the weather in November was the passage towards the end of the month of a remarkably active western disturbance which caused a large excess of rainfall in northwest India. The northeast monsoon after a period of marked activity in the south of the Peninsula extended into Malabar and the Konkan between the 10th and 12th November. Thereafter dry weather set in over the Presidency and continued until the last day of the month, when under the influence of a marked revival of the northeast monsoon rainfall extended into the Deccan. The total rainfall of the month was in very large excess in Sind and Gujarat and in large defect in the Konkan and the Bombay Deccan. Minimum temperature was above normal in Sind. Rainfall associated with the western disturbance at the end of the previous month extended into the central parts of the country during the first three days of December. The first fresh western disturbance of the month caused extensive rain over the region from the north Bombay Deccan to the east United Provinces between the 5th and 7th December. The other three western disturbances took a northerly course and did not affect weather in the Presidency. There was practically no rainfall during the month in Sind, Gujarat and the Konkan, while the Bombay Deccan received almost the normal amount. Cloud amount was normal in all divisions. Humidity was in defect in Sind. Maximum temperature was lower than usual in Gujarat.

IV. The period January to March 1929.—The outstanding feature of the weather in January was the passage of a cold wave of unusual severity towards the close of the month. An intense cold wave advanced through the frontier and had overrun the whole of northwest India by the end of the month, the cold front extending from the United Provinces to the

Bombay Deccan on the last day, when snow was reported from the plains of the north Punjab and several stations in northwest India recorded minimum temperatures below the freezing point. The total rainfall of the month was in moderate to large defect in Sind and the Bombay Deccan and in large excess in the remaining parts of the Presidency. Humidity was in defect in Sind. Minimum temperature was below normal in Gujarat. The other climatic conditions were as usual. Abnormal rainfall in the Peninsula due mainly to remarkably wet weather there during the first fortnight, and marked defect of rainfall over practically the rest of the country were the characteristic features of the month of February. Another noteworthy feature was the cold spell experienced by northern and central India and the adjacent parts of the Peninsula during the first three days, in continuation of the cold wave at the end of the preceding month. The minimum temperatures registered at several stations during this period beat previous records. Sind, Gujarat and parts of the north Deccan were among the areas most seriously affected by the cold wave, where considerable damage to standing crops was reported to have been caused by frost. There was no rainfall during the month in Gujarat and the Konkan, while weather was practically dry in Sind; on the other hand the Bombay Deccan received four times the normal rainfall. Skies were more clouded than usual outside the Konkan. Humidity was in defect in Sind and Gujarat and in excess in the Bombay Deccan. Temperature did not differ much from the normal. Due to general feebleness of the western disturbances during the month of March the weather was abnormally dry and hot in northern India. It was equally dry in the Peninsula except in the extreme south where comparatively greater frequency of thunderstorms produced an excess of rainfall. There was practically no rain in Sind and Gujarat and rainfall was in moderate defect in the Bombay Deccan and the Konkan. Cloudiness was almost usual in all the divisions. Humidity was in defect everywhere except in the Konkan. Both day and night temperatures were above normal over practically the whole of the Presidency, the former being markedly high in Sind and Gujarat.

PRICES

RETAIL PRICES

Northern Division.—Most of the food-grains and other food articles at Ahmedabad recorded a rise in prices in 1928-29 as compared with the previous year. The prices of foodstuffs

in Broach District were lower in the beginning of the year than those prevailing in the corresponding period of the previous year. However, as the year advanced the prices generally went high except those of wheat in Broach, Ankleshwar and Jambusar Talukas, rice in Amod Taluka and jowari in Vagra Taluka, which declined. The prices of foodstuffs and fodder in the Kaira District were moderate throughout the year and at Godhra the increase in the rates of all food-grains except rice was reported to be due to the appearance of frost. There were no marked fluctuations in the prices of foodstuffs at Surat while in the Thana district the prices of the staples (rice and nagli) and other foodstuffs showed a slight tendency to decline due to general good crops throughout the district and the large stock left over from the previous year. The garden crops of the latter district such as plantains, cocoanuts and betel-leaves showed no appreciable difference in the prices during the year under report.

Central Division.—There was a rise in the prices of food-grains in this Division owing to the season not being so favourable as in the previous year. The rise in the prices of food-grains except rice in Ahmednagar was due to large exports to the United Provinces. In the Nasik district, there was a slight rise in the prices of food-grains in Malegaon Taluka due to a comparatively small area being sown with food-grains and preference having been given to cotton ; while the higher price of bajri in Chandor Taluka was due to the lower outturn of the crop owing to the grass-hoppers' pest. The average price of Kadbi in Poona in 1928-29 was Rs. 1-3-10 per maund of 3,200 tolas as against As. 14 ps. 6 in the previous year. In the Satara district, the price of jowari declined owing to a good kharif crop and that of bajri and gram rose owing to an increased demand. The fodder supply was fairly adequate, the price of kadbi being Rs. 3-12-0 per 100 sheaves. In Sholapur, the rain, though ample, was not well distributed and the long drought affected somewhat the growth of the crops.

Southern Division.—Owing to a favourable agricultural season almost all the districts in this Division reported a downward tendency in the prices of food-grains. The paddy crop in the Hangal and Kod Talukas in the Dharwar district failed to some extent but a rise in the price of the commodity was checked by imports from outside. In the same district, there was a heavy rise in the price of jagri owing to the non-importation of the usual supply from Mysore and Kanara but the prices of chillies and cotton fell owing to depression in trade. In the

Kanara district, the price of rice and other foodstuffs recorded a slight fall, that of betelnuts remained stationary and of other garden produce such as cocoanuts, cardamom and pepper fell below the rates ruling in the previous year. Rice straw was cheaper in Kolaba. The prices of fodder in Belgaum were slightly easier than during the previous year.

Sind.—There was a temporary rise in the price of wheat in Sind due to the severe damage caused to that crop by the cold wave and frost during the winter though the prices soon fell considerably owing to large imports of Australian and Punjab wheat. In Karachi there was a rise in the price of jowari due to a short crop but the rice crops in the district were reported to be good. Good kharif crops in Hyderabad led to a general fall in the prices of commodities except jowari, ghee and kadbi. On the other hand, there was a rise in the prices of almost all food-grains at Jacobabad. The rise in the prices of food-grains in Nawabshah was due to increased demand from abroad, that of rice at Sukkur to poor local crops and of bajri at Mirpurkhas to decrease in the area cultivated with that crop. There was a decrease in the price of rice at Mirpurkhas due to imports from other parts of Sind. Rice and jowari in Larkana were also cheaper than in the previous year.

Bombay City.—The weighted index number of retail prices of the six food-grains included in the working class cost of living index number for Bombay city averaged 126 in 1928-29 as against 133 in 1927-28. The " other food " index number declined by 5 points to 173 during the same period. The cost of living index number which takes into account food, fuel and lighting, clothing and house-rent stood at 147 in 1928-29 as against 152 in 1927-28.

WHOLESALE PRICES

Wholesale prices in Bombay City fluctuated somewhat during the year and the " All food " index number rose from 140 in 1927-28 to 148 in 1928-29. Among the sub-groups included under the food group, Cereals, Pulses and Sugar rose by 4, 3 and 5 points respectively while the " other food " group recorded a marked rise of 25 points. Under the non-food group, Oilseeds, Raw cotton, Other textiles and Other raw and manufactured articles registered a fall while Cotton manufactures and Hides and skins advanced in 1928-29 as compared with the preceding year. The non-food index number was

stationary at 147 both in 1927-28 and 1928-29. The general index number rose by 2 points to 147 in 1928-29. The changes in the index numbers for the different groups included in the Bombay Wholesale Prices Index Number are set out in the following table :—

Group Index Numbers of Wholesale Prices in Bombay City

July 1914=100

Groups	Annual average for 1926-27	Annual average for 1927-28	Annual average for 1928-29	Increase (+) or decrease (—) in points in 1928-29 over or below 1927-28
Cereals	147	137	141	+ 4
Pulses	130	132	135	+ 3
Sugar	148	130	135	+ 5
Other food	148	158	183	+25
All food	145	140	148	+ 8
Oil seeds	137	136	133	— 3
Raw cotton	134	160	153	— 7
Cotton manufactures	170	164	169	+ 5
Other textiles	134	134	123	—11
Hides and skins	145	139	158	+19
Metals	152	137	137	....
Other raw and manufactured articles ..	153	146	138	— 8
All non-foods	150	147	147	....
All articles	148	145	147	+ 2

The outturn of cotton in Broach was seriously affected by the frost that appeared at the end of January; but in the Ankleshwar Sub-division the price of 'Kapas' per *Bhar* which ranged from "Rs. 150 to Rs. 185" in February fell to "Rs. 100 to Rs. 160" in April. The price of clean cotton in Surat declined from Rs. 50-10-0 to Rs. 45-15-2 per Indian maund. The wholesale price of paddy in Kolaba ranged from Rs. 52 to Rs. 65 as against Rs. 55 to Rs. 65 per *Khandi* in the previous year.

As compared with 1927-28, there was a rise of one point in the wholesale prices index number for Karachi in 1928-29. This was due to a rise of 2 points in the "food" group and of 1 point in the "non-food" group. The following table shows the changes in the food, non-food and general index numbers of wholesale prices in Karachi :—

Index Numbers of Wholesale Prices in Karachi

July 1914=100

Groups	Annual average for 1926-27	Annual average for 1927-28	Annual average for 1928-29	Increase (+) or decrease (—) in points in 1928-29 over or below 1927-28
Food	141	135	137	+2
Non-food	137	138	139	+1
General	138	137	138	+1

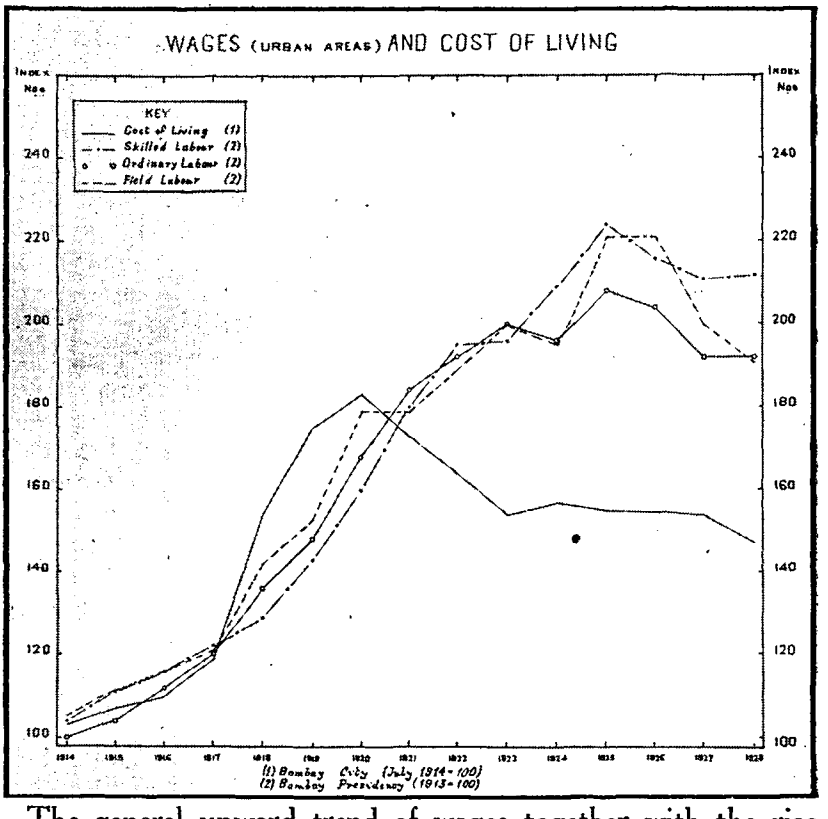
LABOUR AND WAGES

The purchasing power of the rupee based on the working class Cost of Living Index for Bombay City taken at sixteen annas for the prewar year rose from ten annas five pies in the year 1927 to ten annas eleven pies during the year 1928. This is due to the fact that the Cost of Living Index Number remained consistently below 150 throughout the year under review except in the month of January, whereas it never declined below 150 in any month during the previous year. Expressed in terms of percentages the Cost of Living Index was 47 points higher in 1928 than in July 1914, while it was 54 points higher in the previous year. Taking the Presidency as a whole, the downward tendency in the level of wages which set in in 1925 and continued up to the end of 1927 was checked during the year 1928 during which period wages of all classes of labour, except field labour in urban areas and ordinary labour in rural areas, either remained stationary or showed a definite upward tendency. The fall in the Presidency average for daily wages of field labour was due to decreases of 5 and 10 per cent. respectively recorded in the Northern and the Southern Divisions. The following table

gives the index numbers of daily average wages of all classes of labour in 1928 as compared with the year 1927 :—

Index Number of daily average wages in 1928 (with 1927 = 100).

Divisions	Field Labour		Unskilled (ordinary) Labour		Skilled Labour	
	Urban areas	Rural areas	Urban areas	Rural areas	Urban areas	Rural areas
Political Divisions—						
Northern Division ..	95	103	101	91	100	103
Central Division ..	102	104	105	104	102	104
Southern Division ..	90	103	103	105	98	100
Economic Circles—	94	112	101	100	101	104
Gujarat Circle ..	96	106	102	107	100	103
Deccan Circle ..	102	92	99	87	97	101
Konkan Circle ..	96	103	102	98	100	103
Presidency Proper ..	102	110	98	99	100	98
Sind						
Presidency including Sind	96	106	100	99	101	102



The general upward trend of wages together with the rise in the purchasing power of the rupee ought to have tended to

improve the general condition of mofussil labour during the year under review as compared with the previous year. This view is in harmony with the opinions expressed by many Collectors of Districts. Reports from the Central Division state that in spite of a fall in the price of cotton, wages maintained their high level and the labouring classes generally were in a prosperous condition. An improvement in the standard of living was noticeable and ideas of sanitation also appeared to be spreading. District Officers from the Southern Division reported that workers in general received a fair reward for their labour and that their material condition was good throughout the year. There was, however, no noticeable improvement in efficiency. In Sind, labourers were reported to have been more independent during the year on account of the keen demand for labour especially from the Barrage works. Some Collectors reported that the worker is no longer at the mercy of the employer but can dictate his own terms, but there was some stagnation of the labouring classes in certain districts, stated to be due to want of education and lack of ambition. Reports from the Northern Division suggest that although the wages paid for all kinds of labour were by no means low, the general condition of the labouring classes showed no improvement, due partly to the prevalence of illiteracy and partly to a tendency to squander most of the surplus earnings in drink.

Although the extension of cheap and rapid means of transport has made labour in the Bombay Presidency more mobile, the usual migratory movements of labourers from district to district were somewhat restricted during the year due, in some measure, to the fact that they were able to find sufficient employment in their own or neighbouring villages. Another reason for the diminution in migratory movements during the year was that Bombay City, which is one of the chief centres of attraction to mofussil labour, was, for a large part of the year, affected by prolonged industrial unrest. For example many labourers from the Satara district who went to Bombay had to return to their native villages. This forced return and the consequent reduction in the family income negatived to some extent the benefits of a good monsoon. On the other hand, the disturbing influence of emigration on the family life was removed and the labourers turned to subsidiary cottage industries such as poultry rearing, basket-making, weaving of homespun and fishing nets, etc. Immigration of Cutchi and Sindhi labourers into Karachi City took place as usual. A large number of labourers from the central Deccan

districts also immigrated into East Khandesh during the cotton picking season and earned fairly high wages. Due to the failure of the "rabi" crops, a number of labourers in the Sukkur district emigrated from the Rohri and Ubauro Division and Sukkur and Garhi Yasin talukas to the Lloyd Barrage works in order to find work.

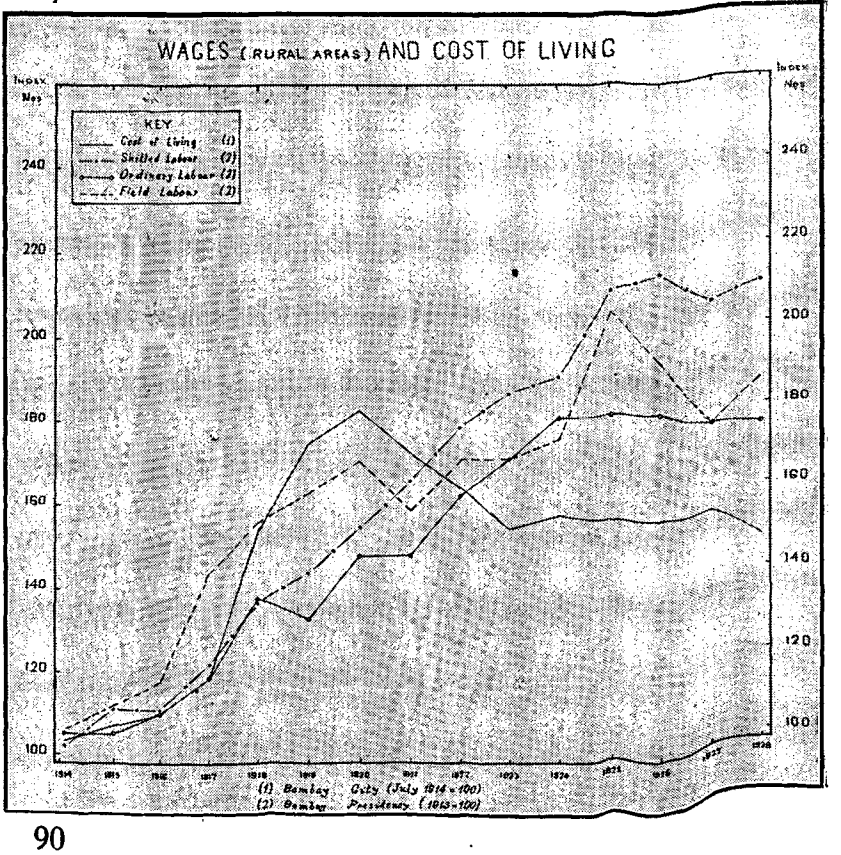
Agricultural Labour.—A decline in urban areas and a rise in rural areas were the characteristics of wages paid to agricultural labour in the Presidency during the year under review. The average daily wage of field labourers in urban areas decreased to nine annas and one pie from nine annas and six pies in the previous year whereas in rural areas it increased from seven annas and six pies to seven annas and eleven pies. Expressed in percentages, the decrease in urban areas was 4 per cent. and the rise in rural areas 6 per cent.

In the Northern Division, agricultural labour earned good wages owing to the demand being augmented by seasonable and good rainfall. In the Forest Mahals of Sawa, Bapgaon, Saiwan and Vavar field labourers earned from four to six annas per day with two meals in addition during the transplantation season. In the Thana district there was, as usual, a paucity of labour for agricultural purposes owing to most of the available labour being either attracted to industrial centres outside the district or to their absorption in local works and factories. The need for agricultural labour was especially felt in the Bhiwandi taluka where about 2,000 labourers were imported from outside the district during the transplanting and harvesting seasons. Wages in the Broach district were lower than the previous year in spite of the keen demand for field labour. This was partly due to the fact that a considerable portion of the cotton crops was damaged as a result of the appearance of frost at the end of January. Agricultural workers in this district are generally drawn from the depressed classes such as Kolis, Bhils, Dheds and Bhangis. The "*Haris*" or permanent servants employed by the agriculturists are granted loans of Rs. 200 to Rs. 300 a year as a matter of course and in several cases are allowed to enjoy the crops of two to four *bighas* of land in addition. It is reported that these *Haris* often ran away in the middle of the season causing great inconvenience and loss to their employers. The problem of the *Haris* is stated to be getting more and more difficult every year and to call for careful consideration.

In the Central Division the average wages of agricultural labourers increased between two or four per cent. both in urban and in rural areas. The various industrial and constructional undertakings in the Division absorbed a large amount of the

available labour with the result that the demand for agricultural purposes was all the more keenly felt and higher wages had to be paid. As in the case of the Northern Division, cultivators experienced great difficulty not only in obtaining and retaining "**Saldar**" (permanent servants) but also in exacting consistent work from them. This added considerably to the cost of cultivation.

Field labourers in the Southern Division earned less in urban areas and more in rural areas as compared with the previous year. The average daily wages in urban areas, which stood at eight annas in the previous year, amounted to seven annas and two pies during the year under review. A favourable monsoon and a good harvest, urgency for the early picking of cotton and the execution of tagavi works were responsible for a keen demand for this class of labour in rural areas throughout the year but the supply was not adequate, and, consequently, field labourers in the more rural areas of the Division were able to command fairly high wages. In some places in the Bijapur district, motor cars had to be engaged to coax labourers to go to work in distant fields, which remained unharvested for a long time for want of adequate labour.



In Sind, agricultural labour such as is employed for picking cotton is paid in kind. Cash wages remained practically stationary in the Nawabshah district, but showed a slight increase in Hyderabad. The condition of agricultural labourers in Sukkur was adversely affected owing to the rabi crops being materially damaged by a cold wave during the winter. The following table gives the average daily earnings of agricultural labour in urban and rural areas by Divisions and Economic Circles and for the whole Presidency with and without Sind, for the years 1913, 1927 and 1928 :—

Average daily earnings of (Field) Agricultural Labour.

Divisions	Daily average wages in					
	1913		1927		1928	
	Urban areas	Rural areas	Urban areas	Rural areas	Urban areas	Rural areas
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Political Divisions—						
Northern Division ..	0 4 9	0 3 9	0 12 3	0 8 6	0 11 5	0 8 9
Central Division ..	0 5 0	0 4 3	0 8 0	0 8 0	0 8 2	0 8 4
Southern Division ..	0 4 0	0 4 0	0 8 0	0 6 0	0 7 2	0 6 2
Economic Circles—						
Gujarat Circle ..	0 4 6	0 3 9	0 12 0	0 8 6	0 11 3	0 9 6
Deccan Circle ..	0 4 6	0 4 0	0 7 9	0 6 6	0 7 5	0 6 11
Konkan Circle ..	0 5 3	0 4 6	0 10 6	0 9 0	0 10 8	0 8 3
Presidency Proper ..	0 4 9	0 4 0	0 9 3	0 7 6	0 8 10	0 7 9
Sind	0 7 9	0 8 0	1 0 3	0 12 3	1 0 6	0 13 5
Presidency including Sind ..	0 4 9	0 4 3	0 9 6	0 7 6	0 9 1	0 7 11

Unskilled (Ordinary) Labour.—In the Northern Division the daily average wages of ordinary labourers amounted to a little more than thirteen annas in urban areas and to eight and a half annas in rural areas. A large part of the available labour was absorbed in the local railway electrification works in Bombay City ; in brick factories, rice mills and timber and charcoal

depots in the Thana district; and in the local mills and Ginning and Pressing Factories in the Broach district.

In the Central Division the Railway workshops at Igatpuri, Manmad and Nandgaon, the Government Distillery and the Security Printing Press at Nasik, the Ginning and Pressing Factories at Malegaon, Nandgaon and Satana, the Bidi making industry at Sinnar, the gold and silver thread industry at Yeola, the main line electrification scheme of the G. I. P. Railway up to Poona, the water supply project at Yeola and the Forest Departmental operations in Peint taluka provided ample scope for employment for a large number of labourers. In the Poona district, the Tata Works in Mulshi Peta did not require as much labour as formerly owing to the completion of the Mulshi Dam. This deficiency in employment was made up by the large sugarcane industry and the three Ginning factories at Baramati. In the East Khandesh district the Spinning and Weaving Mills at Jalgaon, Amalner and Chalisgaon and the Railway workshops at Bhusawal afforded full scope for the labourers at all seasons. During the cotton season there was an increased demand for labour which was met by the immigration of labour from the central Deccan districts. The cotton mills and other factories in Sholapur also attracted much labour from the surrounding areas except during the harvesting season. The daily average wages in the Central Division amounted to a little more than nine annas per day in urban areas and to about eight annas per day in rural areas.

In the Southern Division, employment for both skilled and unskilled labourers was found through the Gokak Falls Mills, the Ginning and Pressing Factories at Bail Hongal, fuel contracts and the two tile factories in the Khanapur taluka. In the Kanara district the surplus labour in the below Ghat talukas found ample employment in the above Ghat talukas where there was a shortage in the supply of ordinary labour. In Sind, the Barrage and the Sakrand Farm Works and the construction of the Mehrabpur Pad Idan loop of the Feeder Railway absorbed a large number of ordinary labourers. The average daily rates of wages for unskilled workers in Sind amounted to Re. 1-0-5 in urban areas and Re. 0-12-4 in rural areas as against Re. 1-0-9 and Re. 0-12-6 respectively during the previous year.

The following table shows the daily average wages of unskilled labour in the same way as for agricultural labour :—

Average daily earnings of Unskilled (ordinary) Labour.

Divisions	Daily average wages in					
	1913		1927		1928	
	Urban areas	Rural areas	Urban areas	Rural areas	Urban areas	Rural areas
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Political Divisions—						
Northern Division ..	0 5 3	0 4 3	0 13 3	0 9 6	0 13 5	0 8 7
Central Division ..	0 5 9	0 4 6	0 8 9	0 7 6	0 9 2	0 7 10
Southern Division ..	0 5 9	0 4 9	0 9 9	0 7 9	0 10 0	0 8 2
Economic Circles—						
Gujarat Circle ..	0 5 3	0 4 0	0 12 6	0 8 9	0 12 7	0 8 9
Deccan Circle ..	0 5 9	0 4 6	0 9 0	0 7 0	0 9 2	0 7 6
Konkan Circle ..	0 6 3	0 5 3	0 12 6	0 10 9	0 12 5	0 9 4
Presidency Proper ..	0 5 9	0 4 6	0 10 3	0 8 3	0 10 6	0 8 1
Sind ..	0 8 0	0 7 3	1 0 9	0 12 6	1 0 5	0 12 4
Whole Presidency (including Sind) ..	0 6 3	0 5 3	0 12 0	0 9 3	0 12 0	0 9 2

Skilled Labour.—Considering the Presidency as a whole the supply of skilled labour was not sufficient to cope with the demand. In the Northern Division, carpenters and masons in the Thana district were able to earn an average daily wage of Rs. 2 to Rs. 2-8-0 which increased to as much as Rs. 3-8-0 in the Forest Mahals. In the Ahmedabad district, wages were higher in the Prantij, Modasa and Sanand talukas but lower in the Dholka taluka as compared with the previous year. In the Central Division there was an improvement of 2 per cent. in urban areas and 4 per cent. in rural areas. In the Southern Division wages were fairly steady except in the urban areas where they fell by 2 per cent. In Sind, except for a slight fall in the more rural parts of the Hyderabad district, wages of the skilled labourer did not show any signs of decline. The daily average for the rural areas for the whole of Sind was Rs. 1-14-9 as compared with Rs. 1-15-6 in the previous year.

The following table sets out the average daily wages paid to skilled labour in the various parts of the Presidency in the same way as in the case of Agricultural and Ordinary Labour :—

Average daily earnings of Skilled Labour

Divisions	Daily average wages in					
	1913		1927		1928	
	Urban areas	Rural areas	Urban areas	Rural areas	Urban areas	Rural areas
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Political Divisions—						
Northern Division ..	0 13 9	0 11 9	2 2 3	1 11 9	2 2 4	1 12 8
Central Division ..	0 13 0	0 10 6	1 8 6	1 5 3	1 9 0	1 6 1
Southern Division ..	0 10 9	0 9 9	1 3 9	1 2 9	1 3 5	1 2 8
Economic Circles—						
Gujarat Circle ..	0 13 6	0 11 9	2 1 0	1 10 6	2 1 5	1 11 8
Deccan Circle ..	0 11 9	0 10 0	1 5 6	1 3 3	1 5 7	1 3 9
Konkan Circle ..	0 13 9	0 11 3	1 15 3	1 14 3	1 14 4	1 14 6
Presidency Proper ..	0 12 6	0 10 9	1 10 3	1 6 9	1 10 3	1 7 5
Sind ..	1 4 6	1 2 0	2 10 6	1 15 6	2 10 5	1 14 9
Whole Presidency (including Sind) ..	0 13 9	0 11 9	1 13 0	1 8 3	1 13 2	1 8 8

Movements of wages and prices dealt with in the first paragraph of this note are graphically illustrated in the charts attached.

FORESTS

For purposes of administration the Presidency is divided into four Forest Circles, which are in charge of Conservators. The Chief Conservator is at the head of the Department.

Forest administration is a branch of the general administration and the central authority in forest matters is the Commissioner of a Division, subject to the general orders of Government. The Chief Conservator is the local and technical head of the Forest Department and the technical adviser of Government in forest matters. Forest Officers in charge of Circles have full

powers in all professional operations of technical forestry; but in all other matters, such as those of rights and privileges of the people in forests, local supply of grass, grazing and fodder and generally as regards the relation of the department with the people, control vests in the local revenue officers. A Working Plans Division is maintained in each Circle and the duties of the working plans divisional officers are to ascertain the capabilities of the forests in the production of timber and other forest produce and to prepare scientific schemes for the exploitation of the forests so that they may be worked for the greatest benefit both of the State and the people. The work in connection with the preparation of working plans is generally well advanced, but revision of plans is carried on continuously. The classification of forests into forest proper, fuel and fodder reserves and pastures has been completed in all Circles and the areas classed as pastures have been transferred to the Revenue Department for management.

The area under "Forests" in this Presidency is nearly 15,000 square miles.

The financial results of the year under review compared favourably with those of the previous year, this being due in the main to improved conditions in the timber market in the Northern and Southern Circles. Progress was made with works of development and improvement as far as funds sanctioned by Government permitted. Liberal expenditure is still necessary for completing the various road schemes needed to open up the Dangs and Peint with a view to facilitate exploitation of a fine timber-producing area, as yet unworked.

The gross revenue of the year rose by Rs. 90,700—to Rs. 73·77 lakhs—over the figures of the previous year and fell by Rs. 9,000 as compared with the average of the preceding five years. A rise in the Northern and Southern Circles was counterbalanced by a fall in the Central and Sind Circles. The surplus exceeded that of last year by Rs. 1,27,860 and was less than the average of the previous quinquennium by Rs. 1,900. There was a decrease in expenditure from Rs. 43·07 lakhs to Rs. 42·70 lakhs.

Communications.—Construction was in progress on 241 miles of new roads and repairs were carried out on 1,238 miles of old roads. The total expenditure under this head was Rs. 2·45 lakhs as against Rs. 2·53 lakhs during 1927-28. Most of the expenditure both on new works and repairs was incurred in the Northern and Southern Circles where the need

for better communications is most felt. The total expenditure on buildings was Rs. 1·13 lakhs as against Rs. 1·03 lakhs.

Forest Offences.—There was an increase of 1,120 in the total number of offences against the Forest Laws, all Circles except the Central Circle contributing thereto. The number of offences under "unauthorised fellings" increased by 781 or 8 per cent. and were heavy in Thana, West Khandesh and Poona Divisions.

This considerable increase was attributed by the Chief Conservator to the suspension of communal punishment. This is not much resorted to in the case of illicit cuttings, being unsuitable as a remedy for comparatively isolated offences, but where hacking and wanton damage is done over large areas or when organised loot is carried out on a large scale, the Department will, he thinks, find it impossible to protect its forests unless the power to award this form of penalty is restored. The increase under "other offences" was due partly to encroachments from inforest cultivations and partly to enforcement of transit rules. Out of the 21,124 offences reported 16,485 cases were compounded and compensation amounting to Rs. 1·57 lakhs was recovered in 15,925 cases, the average per case being Rs. 9·3 as compared with Rs. 9·6 in the previous year. Offenders in 560 cases were let off with a warning and in 3,491 or 15 per cent. of the total of new and pending cases the offenders were not detected. There was an increase of 71 square miles in the area burnt during the year. That many of these fires were intentionally started, the chief object being to get an early supply of green grass, is evident from the fact that in Thana many had their origin in the interior of reserved forests and especially in closed areas. Carelessness in rab burning, illicit distillation and careless smoking have also to some extent contributed to the increase.

The Conservator of Forests, Northern Circle, reports that in spite of all the measures taken so far, forest fires have not decreased. On the other hand they have become so prevalent of late that further measures are considered necessary to bring home to the villagers the serious nature of deliberate incendiarism. The Conservator therefore proposes that in villages in which fire-protection is bad the burnt areas should be closed to grazing for one year. Firing jungles for the purpose of producing early green grass would not therefore benefit those responsible.

Protection from Cattle.—The forest areas open and closed to grazing were as follows :—

	Square miles	per cent.
Closed to all animals for the whole year ..	1,676	11·24
Closed to all animals for part of the year ..	279	1·87
Open to all animals except browsers for the whole year	9,412	63·15
Open to all animals for the whole year ..	3,538	23·74
	14,905	

The area open to grazing was almost everywhere sufficient, and closure was relaxed as usual in cases of real necessity. During the year nearly 2,496,000 cattle were admitted to grazing in the forest lands as against 2,482,000 in the previous year. About 107,000 animals were impounded for unauthorised grazing in open and closed forests and 473,600 animals were allowed free. The grazing fees collected amounted to Rs. 5·37 lakhs, as compared with Rs. 5·04 lakhs in the previous year, the value at full rates for the year under report being Rs. 22·03 lakhs. There was a slight decrease in the number of cattle grazed in the Northern, Southern and Sind Circles, chiefly due to (*a*) reduction of grazing area in consequence of disforestment in the Northern Circle, (*b*) the spread of rinderpest among animals and (*c*) low inundation and the absence of rain in Sind Circle.

Sylviculture.—The general progress of the areas under artificial regeneration was satisfactory except in Surat, Khandesh and Sind, where the abnormally severe frost which occurred in January killed, or damaged, several thousands of well established seedlings and saplings. There was the usual damage from fire which exceeds that done by all agencies put together.

Reproduction by coppice was satisfactory except in the Surat Division where the January frost did a certain amount of damage to one year old coppice, and in West Khandesh Division where *anjan* (Hardwickia binata) coppiced badly. Coppice regeneration was as usual rather poor in the above ghat forests of the Nasik District owing to low vitality of the parent trees, scanty rainfall and poor soil and unrestricted grazing which does not exclude even sheep and goats.

Exploitation.—During the year 5,259,000 cubic feet of timber and fuel were extracted departmentally, together with sandalwood worth Rs. 1,69,500 and minor produce, grass, etc., to the value of Rs. 17,000.

The actual outturn of major and minor produce removed by consumers and purchasers during the year 1928-29 was :—

	Rs.
Major Produce	
(1) Timber 4,550,000 cubic feet valued at ..	24,57,000
(2) Fuel 37,374,000 cubic feet valued at ..	5,80,000
Minor Produce	
(3) Bamboos—Valued at	1,71,000
(4) Grass and Graz ng—Valued at	7,65 500
(5) Other minor produce—Valued at	2,34,000
making a total for minor produce of ..	11,70,500

The outturn from all sources of forest produce during 1928-29 was :—

	Cubic feet.
Timber	6,526,000
Fuel	49,517,000

The total expenditure on the management of State Forests was Rs. 18,61,500 as against Rs. 18,29,000 in the previous year. The increase was due to more expenditure on communications and buildings in the Central Circle and on departmental exploitation in the Southern Circle.

Famine Grass Operations.—Famine Fodder operations were carried out in Thana and Panch Mahals Districts, the quantity of grass supplied during the year by the 9-year monopoly contractors being 64½ lakhs lbs. The grass areas in the Panch Mahals were intentionally grazed over by ill-disposed persons following the Godhra riot and the contractors could not deliver the stipulated quantity of grass. The quantity of grass on hand at the three storage depôts (Godhra, Dohad and Palghar) at the close of the year was 291 lakhs lbs.

Forest Advisory Committees.—Government have sanctioned the formation of Forest Advisory Committees in certain districts of the Presidency proper, these bodies being composed of a limited number of Forest and Revenue Officers and of non-officials of suitable standing with the Collector as the Chairman. The idea is to promote informal discussion of questions concerning the local administration of the Forest Department and for directing attention to and remedying any legitimate grievances or complaints of the public.

CO-OPERATIVE MOVEMENT

A vigorous policy of weeding out improvident members from societies and cancelling bad societies was continued

throughout the year and it has naturally had its effect on the figures. Very few new societies were registered during the year. The season also cannot be said to have been good throughout the whole of the Presidency. Gujerat was again the worst sufferer and the sudden frost in February 1929 almost completely destroyed the principal money crops like tobacco, cotton and tur. The number of societies on 31st March was 5,364 as compared with 5,223 last year. Membership increased from 539,470 to 548,634. The decrease in the rate of new additions to membership is particularly noticeable as in many of the old societies the defaulting members were expelled after the old overdues had been recovered. New societies were registered very cautiously and only after very careful enquiry. In spite of these factors the working capital increased by nearly three-fourths of a crore. The huge figure of a little less than Rs. 12 crores illustrates the large part which the Co-operative Movement is playing in the economic life of the Province. The Reserve Fund increased from Rs. 70½ lakhs to Rs. 80½ lakhs. The very satisfactory figure of increase of the Reserve Fund clearly shows that the movement is now recovering its lost tone.

The number of agricultural credit societies rose from 4,177 to 4,317, but the membership and the working capital decreased from 263,493 to 262,569 and Rs. 3 crores 52·93 lakhs to Rs. 3 crores 49·84 lakhs respectively. This is due to the fact that some bad societies with a large membership had to be cancelled and the new societies that were registered had a small number of members. The working capital decreased, as finance was very cautiously given both by the Provincial and District Central Co-operative Banks. The Reserve Fund shows an increase of nearly Rs. 5¾ lakhs. Progress was steady in Gujerat except in the Matar Taluka. In Khandesh there was appreciable progress all round. In the Thana District the work of weeding out bad societies and members is almost complete and 15 new societies were registered during the year in the Bhiwandi and Wada Talukas. The Bhiwandi Taluka seems to be a promising field for further development. In the Nasik District nearly 50 per cent of the societies are in a bad condition. The weeding out process will have to go on for a year more in the Central Division, but side by side with it a certain amount of expansion in the best parts is also possible and a few new societies are being registered where the Bank and the Supervising Union have carefully prepared the ground. In the Belgaum Division there was a net increase of 12 societies and the Ghat Districts

of Belgaum and Satara are both promising fields for further expansion. In the Southern Division, Dharwar District has 473 societies and there is very little scope now for the organisation of more agricultural societies, since almost all the villages having a population of 500 and above with a school have got an agricultural credit society.

The amount of unauthorized arrears for the whole Province was Rs. 95¾ lakhs out of Rs. 318 lakhs due for repayment during the year. There is a welcome reduction, though small (3 per cent.), in the total percentage of overdues. The crops are not generally sold before 31st March and the prices of the produce are not realized before that date. The figures at the end of March do not show the correct position and the question of changing the date of close of the "co-operative" year is again being examined and the opinions of officials and non-officials on the subject have been called for. As regards individual districts, the higher percentage of overdues in the Ahmedabad and Kaira Districts is mainly due to timely extensions not being given by the Banks. The percentage of overdues has been very substantially reduced by nearly 10 per cent in the East Khandesh District and by 8 per cent in the West Khandesh District. The percentages now are 20 and 17 as compared with 30 and 25 last year in the East and West Khandesh Districts, respectively. In the Poona and Nagar Districts the percentage of overdues is 62 and 72 as compared with 56 and 70 last year. In the canal areas of Nira, Godavari and Pravara the proportion of fresh advances to recoveries is 1 : 2. The excess of recoveries over fresh advances amounts to more than Rs. 2 lakhs. In other words, the commitments in the three canal areas have now been reduced by more than two lakhs and, considering the present difficulties under which sugarcane is cultivated, these results indicate that the problem in the canal areas is being gradually but successfully dealt with. It is interesting to note that out of 4,317 agricultural credit societies as many as 1,647 have no overdue arrears and there are 490 societies with arrears of less than 10 per cent. Nearly 50 per cent of the societies have arrears of less than 10 per cent, an almost negligible figure. The main structure of the Co-operative Movement is quite sound and the bad societies are concentrated in a few districts which are either notoriously liable to famine or, as in the canal areas, have been overtaken by a sort of widespread calamity as regards their principal crop. Even in these tracts the position is gradually improving.

The number of agricultural non-credit societies decreased from 257 to 251. This side of the movement presents special difficulties. Most of these undertakings, particularly sale societies, are of the nature of commercial enterprises and the usual risks borne by ordinary traders must also be borne by the co-operative societies. In contrast with individual business the societies have to depend on the corporate guidance of Committees which, in competitive business, is always a disadvantage. A good deal has to be left to the Manager or the Managing Director of the concern and there are instances where such societies have been managed simply as one-man concerns. Close supervision over the manager is naturally difficult and everything depends upon the skill, ability and reliability of individual Managing Directors. During the year special attention was paid to the organisation of Purchase and Sale Unions with membership confined to societies. There are four such Unions working in conjunction with the Bombay Provincial Co-operative Bank. The most important of agricultural non-credit societies continue to be those for the sale of the produce of the agriculturists. There are 59 such societies. The Gadag and Hubli Cotton Sale Societies are the biggest. They sold cotton worth Rs. 8·89 lakhs and Rs. 7·35 lakhs, respectively. In Gujerat the Surat District stands first in the development of sale business. The societies in the Surat District sold cotton lint and seed of the aggregate value of Rs. 19·41 lakhs.

Of the Land Improvement Societies, the Yelavagi Waddars' is the best of its type. The Salukatta Dam Construction Society built a pukka dam at a cost of Rs. 5,643 and brought 125 acres under cultivation. There are 14 Fencing Societies with a membership of 727. A total length of about 25 miles of wall and wire fencing has been put up at a total cost of Rs. 46,397. A Supervising Union for the fencing societies has now been organized and it is hoped that the work of the fencing societies will be properly supervised. Of the cattle breeding societies the Sidenur society is the best. It has now got 116 cows and two premium bulls. Owing to financial stringency, fresh registration of Taluka Development Associations has been stopped. The number of such associations is 78 in the whole Presidency.

The policy of increasing the number of Supervising Unions is being continued. The efficiency of the Supervising Unions as a whole increased considerably and the number of societies that are being affiliated to these Unions is also increasing. Out

of 4,317 agricultural societies, as many as 2,079 have been affiliated to the various Supervising Unions and are thus receiving the benefit of supervision. The district Union Boards are now functioning in all Districts.

The Bombay Provincial Co-operative Bank continues to be a model institution. Three more branches were opened, bringing the total number to 22. The Bank finances 1,182 societies through its head-office and branches and has engaged a staff of 30 Inspectors, of whom 9 are part-time. The total deposits held by the branches at the end of the year stood at Rs. 26·47 lakhs. The branches are thus able to tap the local resources. Three land mortgage societies have been registered at Broach, Dharwar and Pachora, and the first batch of loan applications has now been received from Pachora by the Provincial Bank and is being dealt with. It has been decided that the money raised at about 5 per cent should be passed on to the societies and borrowing members at 7 per cent, the margin of 2 per cent being utilized for expenses of the Land Mortgage Department of the bank and land mortgage societies. The number of District Central Banks was 19, the same as last year. The working capital increased from Rs. 247 lakhs to Rs. 265 lakhs and the Reserve Fund from Rs. 3·78 lakhs to Rs. 4·41 lakhs.

The number of non-agricultural credit societies rose from 516 to 535. Out of these the number of full-fledged banks with a working capital of over Rs. 50,000 is 70. Urban banking in this Presidency is now very well developed and even small towns other than Taluka towns now enjoy the benefits of banking facilities through the urban banks. The percentage of arrears in the non-agricultural societies is only 11·4.

There has been no change in the Consumers' Movement. The number of societies has been further reduced from 38 to 35. Only a very few Stores worked satisfactorily. The number of housing societies rose from 52 to 56. The working and morale of the housing societies in Bombay has appreciably improved. Internal dissensions have almost disappeared. Out of the 13 societies of this class in Gujerat 12 are in Ahmedabad. The Brahma-Kshatriya Housing Society completed the buildings of all its members soon after the close of the year. The Saraswat Society at Poona added seven more to the six buildings already constructed last year. In Sind the Karachi Parsi Housing Society was the first in Sind to commence its building operations and it has now almost completed its work. The total number of reconstruction

housing societies on 31st March was 50, 25 being in the Ahmedabad District and 25 in the Hyderabad District of Sind. The total amount of Government loan advanced was Rs. 5·60 lakhs.

Except a few individual societies almost all Producers' Societies worked at a loss. The Producers' Societies have met with worse failure than even Consumers' Stores, and their failure is mainly due, either to the inefficiency of management, or the absence of any real spirit of joint effort or co-operative production. A systematic campaign of co-operative education must be carried on among weavers and, pending the creation of a strong "will to co-operate", no marked progress in this type of activity can be expected.

The Bombay Provincial Co-operative Institute and its Branches are trying to do the best with their very limited resources. Three co-operative schools were opened on 1st July 1928 at Surat, Poona and Dharwar. The schools have organized courses of training for rural secretaries, urban secretaries, supervisors and bank inspectors, the medium of instruction being the local vernacular. It is hoped that the schools have met a long-felt want by providing continuous systematic training in place of the short courses which formerly used to be given.

HORTICULTURE

PUBLIC GARDEN

Bombay Municipal Gardens.—Ten Public Gardens and fifteen public recreation and play grounds were maintained during the year in Bombay city. The number of visitors to the Victoria Gardens during the year was 2,321,000 against 2,325,000 in the year previous, a decrease of 4,000, which was due to the mill strikes and communal disturbances in the City. The Gardens were closed to the public for 21 days in February 1929 as the Cheshire Regiment was stationed there during the riots. During the year 110 band performances and 21 concerts of Indian music were given at various places. Two wireless concerts were also given free of charge by the Indian States and Eastern Agency, Ltd., and three by the Star Radio Co.

Empress and Bund Gardens, Poona.—These gardens are maintained by the Agri-Horticultural Society of Western India. They are of a highly ornamental character and an asset of great value to Poona. On the whole, the season was favourable for garden operations. A cold wave passed over

Poona at the end of January, but the main damage done was to the mango trees which were coming into full blossoms.

The Flower Garden was kept well stocked practically throughout the year. The annuals in both the seasons, though late in coming to flowers, gave a good show and in August, September, October and in January and February the garden looked particularly bright with flowers. The Balsams furnished a perfect display during the short time they were in flower. The seedling single Dahlia beds exhibited a multitude of colour and form. The income realised from the sale of cut flowers, wedding and presentation bouquets, decorated baskets, wreaths, crosses, etc., was Rs. 3,900 and that from the sale of plants was Rs. 6,550. The receipts from the sale of seeds were less by Rs. 970 than those of the previous year. The total receipts at the Empress Gardens were Rs. 19,200 as against Rs. 22,700 for the preceding year and the expenditure amounted to Rs. 21,000 as compared with Rs. 24,900 in the preceding year.

The Bund Garden adjoining the river attracts crowds of visitors particularly during the monsoon season. The sales of this garden are only of flowers and ornamental plants and are hardly adequate to pay the wages of the malis. The receipts and expenditure amounted to Rs. 1,344 and Rs. 2,930, respectively.

The Society celebrated its annual Flower Show on the 12th September 1929 with a record entry of good exhibits.

CHAPTER VI

TRADE AND COMMERCE

INDUSTRIES

NORTHERN DIVISION.—In Ahmedabad District there were 190 factories on 1st August 1928. Eleven new factories were added and six were struck off the register during the year under report, leaving 195 at the close of the year. Two new mills will shortly start work in Ahmedabad City. Two more are under construction, while the erection of another is under contemplation. The old Viramgam Alfred Mill is expected to start work under a new agency in the course of the next calendar year. In many cases the old mills are effecting improvements in various directions, the enlargement of spinning or weaving departments and the installation of humidifying and ventilating plants, etc. The working conditions in the new mills as compared with those of many old mills will be far more satisfactory since they are being constructed on up to date lines with many improvements. In spite of the world wide industrial depression the textile industry of Ahmedabad is making fair progress.

Of the two textile mills at Nadiad in the Kaira District one (the Manor Mill) was closed throughout the year owing to financial difficulties. The number of hand-looms in the Borsad Taluka was the same as last year, i.e., 1,084. The rice and flour mills worked well during the year but three of the ginning factories at Dakor did not open owing to lack of cotton.

In the Panch Mahals District the principal trade is in timber and grain. The ground-nut and flour mills were busy, but there was less work in ginning factories due to the damage done to cotton by frost. The manganese mines at Shivrajpur and Bamankuva and the fire clay factory at Derol showed steady progress.

In Broach cotton is the chief product and constitutes the important trade of the district, but the mill industry there showed a tendency towards dullness. The river-borne trade of the port of Kavi showed a remarkable increase both in imports and exports, but there was a noticeable decline in imports at Tankari and Dehej.

In Surat cotton is the principal produce and there are hand weaving looms in all the talukas. They weave a coarse cloth

chiefly used by the Kaliparaj. The local silk and embroidery business in Surat city was in a fairly flourishing condition. Grass and firewood is largely exported to Bombay from Chikhli, Bulsar and Pardi talukas. The yield of the mango crop during the year was only fair.

In Thana rice, which is the main product of the District, was exported to the value of about Rs. 80 lakhs, exclusive of paddy which was exported to the extent of Rs. 19 lakhs. Other articles of export in that district are timber, charcoal, grass, salt, bricks, lime, dry and fresh fish, plantains, betel leaves, vegetables, saris and woollen cloth. Bassein exported vegetables worth about 3 lakhs of rupees to Bombay. The iron workshop at Bhiwandi, which manufactures accessories for rice mills and implements for labourers, was flourishing. The number of hand-looms working in Bhiwandi during the year was 3,000 as against 2,920 in the last year and they employed about 7,000 men. The Raymond Woollen Mills manufacture woollen cloth and yarn and export them to Bombay and North India. The Bone Mills in Thana and Kalwa afford ample labour to the depressed classes.

Central Division.—There were five mills in East Khandesh, two at Jalgaon, two at Amalner and one at Chalisgaon, most of which did well.

In the West Khandesh District the new Pratap Spinning and Weaving Mill at Dhulia was reported to be just beginning to pay its way.

As regards the mill industry at Sholapur, the Collector observes as follows :—

"The general depression which has for some years affected the mill industry showed no signs of abatement during the year under report. Stoppage of work locally and in Bombay saved what might have been a very critical position as the stock on hand mounted up to unmanageable limits and the cessation of production tended to reduce the effect of over production. But this represents a most unsatisfactory state of affairs and that relief of this nature to an industry whose markets are loaded up with stocks although temporarily staying a crisis is in the long run undesirable."

The sugar factory of the Belapur Syndicate in the Ahmednagar District made fair progress and is now producing sugar of a superior sort.

The preparation of jaggery from sugarcane was carried on extensively in the Haveli, Bhimthadi and Indapur talukas of the Poona District. The cultivation of grapes and potatoes has

been successfully undertaken in Bhimthadi Taluka. Myrabolans worth Rs. 85,000 were exported from Ambegaon to Bombay during the year under review.

The chief crop of the Satara District is groundnut, which is produced in large quantities, especially in the Southern talukas of the district, and is largely exported to foreign countries. From Patan Taluka alone groundnut worth about two to two and a half lakhs of rupees is said to have been exported during the year. The agricultural implements works of Messrs. Cooper Bros. at Satara and the Iron Factory of Messrs. Kirloskar Bros. at Kirloskar Wadi continued to progress satisfactorily. Among the products raised in the District for the Bombay market were onions from Khandala (now in Wai Taluka), eggs from the Man Mahal, betel leaves and potatoes from Koregaon, strawberries, potatoes, beans and peas from Mahableshwar Mahal and butter and eggs from Javli Taluka.

The Glass Factory at Talegaon, the Ravi Varma Fine Arts Litho Printing Press at Malavli and the carpet factory at Kune continued to work satisfactorily. The bidi making at Sinnar, the gold and silver thread work at Yeola, the manufacture of Rosha oil in the Baglan and Kalwan talukas were carried on as before. The Tikekar Textile Factory and Metal Works at Tikekarwadi, the Ice Factory at Bhusawal, the Ink Factory at Parola and the Iron Foundry at Pachora continued to show steady progress.

Southern Division.—In spite of the poor outturn of cotton owing to unseasonable rain and despite the slump in the trade due to mill strikes in Bombay, the number of ginning and pressing factories in Bijapur and Dharwar increased and all had sufficient work. The Gokak Falls Mills (Belgaum) and the Bharat Spinning and Weaving Mills of Hubli worked throughout the year. Wheat, jowari, oil-seeds and groundnut had a brisk trade in Bijapur. The Cotton Sale Societies at Hubli and Gadag fared well. The wheat trade did not flourish in Dharwar though other commodities had a good year.

The trade in spices and timber flourished in Kanara. Kolaba exported large quantities of rice and paddy to Bombay, Thana and Malabar.

The hand-loom industry which is well established in the Karnatak recorded a good year but hand looms in the coast districts had a lean year. The looms in the Ratnagiri District had a smaller turnover than in the previous year. The blanket weaving industry flourished in Bijapur.

Building stones from Badami, lime stone from Bagalkot and dyed stuffs from Ilkal and Guledgud (Bijapur) continued to be much in demand.

The Dhutpapeshwar Pharmacy at Panvel (Kolaba) had a good year and the copper and brass industry at Hubli did good business.

The tile factories at Manki (Kanara) and Mora (Kolaba) had a prosperous year, the coloured and patterned tiles of the latter being much in demand in Bombay ; but those of Khanapur (Belgaum) and Gurumwad (Ratnagiri) did not do well. Cashew-nuts worth Rs. 6,69,000 were roasted at Malwan and Vengurla for export. The cart-wheel industry of Panvel flourished as usual.

The fishing industry continued to do well on the coast and the Kolaba fishermen, to whom the proximity of Bombay afford special marketing facilities, had again a very good year.

Bombay Suburban Division.—The general depression in trade and industry remained nearly the same as last year and no new industry was started.

The principal trades and industries in the District are :—

(1) Manufacturing of salt in the villages of Bhandup and Mahul.

(2) The Braithwait's Pipe Works at Mulund.

(3) Two Litho Presses at Ghatkoper.

(4) Two Spinning and Weaving Mills at Kurla.

(5) Match factories at Kurla, Ghatkoper, Andheri, Vile Parle, Borivli and Ambernath.

(6) Dyeing factories at Kurla and Chembur.

(7) Stone quarries at Malavni (Kharodi) and Akurli. The Malavni quarries supply superior stones for building purposes and Akurli quarries give good materials for filling in and they were utilised for the Back Bay Reclamation.

(8) Bone mill and carbon producing factory at Vikhroli.

(9) Aluminium and silver factories at Vile Parle.

(10) Messrs. Dharamsi Morarji Chemical factory at Ambernath.

The area in the Ambernath Taluka though intended for industrial development has not yet been developed to the extent that was expected, no doubt due to the slump in the market. At present there is practically no demand for land for opening of new industries in the area.

Sind.—The local trade showed no signs of improvement. Although the inundation was favourable and the khariff crops, chiefly cotton and paddy, were grown extensively and their

yield too was good, yet the advantage thereby gained was counterbalanced by a fall in prices. Some of the other crops, *viz.*, wheat, oil-seeds, and sugarcane suffered from frost and consequently their yield was poor. The money market continued to be tight.

There was no appreciable change in the local industries except that 19 rice husking factories were newly established in the Larkana District, which grows paddy to a large extent, and that one cotton ginning factory was opened at Sinjhoro in the Nawabshah District. The number of rice-husking and flour-grinding machines in Thar Parkar District, on the other hand, decreased from 12 to 8 although the work turned out by 8 in the year under report was even greater than that in 1927-28. The cotton ginning factories had sufficient business during the year, but the Government ginning factory at Mirpurkhas remained closed. The oil pressing and cane pressing industry suffered considerably as these crops were damaged by the cold wave. The leather factory at Pano Akil continued to do well. No improvement was noticeable in the small indigenous cloth industry, and none is possible until the methods employed are radically changed. The silk cloth industry at Rohri was working well. The coarse woollen cloth manufactured at certain places in Sind was consumed locally. The dyeing, lacquer work and other small industries, such as those connected with earthenware " pan " grass, metal work and soap went on as usual. The silken lungis industry at Tatta is, for want of demand, showing signs of decay, though the Weavers' Co-operative Credit Society is trying to keep the industry going. The number of public motor services is increasing every year and during the year under report in all 2,178 motor cars were received at the Port of Karachi.

DEPARTMENT OF INDUSTRIES

The commercial and industrial intelligence branch of the department continued to be both popular and useful. As a rule, the Department of Industries transfers inquiries from abroad for opening commercial relationships with Indian firms to the Director-General of Commercial Intelligence, Calcutta. Inquiries from Indian firms for opening trade relationships with British firms were transferred to His Majesty's Trade Commissioner, Bombay. Assistance was also rendered, wherever possible, to industries in other ways than by giving technical advice and commercial information.

Development of Industries.—The trade depression continued during the year. The textile mills were specially

affected and those in Bombay City were greatly handicapped by continued strikes. In spite of the depression however it is reported that there were nine new mills under construction during the year in the Presidency excluding the Indian States. The Chemical Industry also continued to be in a bad way. The local concerns namely the Dharamsi Morarji Chemical Co., Ltd., the Eastern Chemical Co., Ltd., and the Pioneer Magnesia Works, successfully applied to the Government of India for submitting their case to the Tariff Board. The Board sat in Bombay in November 1928. The department was in touch with the above three concerns and submitted to Government some information required by the Tariff Board. The most important new industry established in the Presidency during the year under review was the manufacture of motor cars at Sewri in Bombay. The development of the motor car industry should make it possible to manufacture locally a number of engineering and other products such as engines, etc., required for motor cars. The industry will also provide an impetus to many other factories such as leather works for upholstery, canvas for hoods, etc.

Fishing Industry.—The only grant available for expenditure under this heading was Rs. 1,000 for Oyster Culture in Sind. This work is in charge of the Collector of Customs, Karachi. General work was, however, attended to by the department, of which the following are some examples. Information was obtained and supplied in connection with carrying of fish quickly to port. Inquiries were made in this connection from the local ship-builders for two alternative schemes, namely, tugs with carrying capacity of 3 to 15 tons of fish, and fitting small engines to the ordinary existing sail-fishing boats, so that the latter themselves could bring the catch quickly to port instead of delivering it to steam tugs.

Cottage Industries.—The control of the weaving section was transferred to this department in September 1928. The section continued to help and advance the Hand Weaving Industry in the Bombay Presidency by means of weaving schools and weaving demonstrations. Seven weaving schools were run in the different districts of the Presidency, excluding Sind. The schools and demonstrations, being peripatetic institutions, were transferred from one place to another as found necessary.

One weaving school is meant exclusively for Agriculturists and its function is to introduce hand-weaving as a spare-time occupation among the cultivators of the Presidency. The

school is equipped with seven pit-flyshuttle looms and two frame flyshuttle looms, and both modern and old type healds, reeds, etc., are used so as to impress on the agriculturists attending the school the superiority of the former. A maximum number of eight students is generally admitted to the school and the course lasts for six months. In the beginning of the year under report the school was working at Harti—a village in the Dharwar District—and eight agriculturists from 16 to 30 years of age attended the school. At first the agriculturists of this place took great interest in the school and their attendance up to May 1928 was satisfactory, but with the setting in of the monsoon, it began to fall gradually and ultimately it became difficult to secure a sufficient number of students. On account of the sudden indifference of the agriculturists, it was not possible to introduce any flyshuttle looms at Harti and the school was, therefore, transferred to Belganur in the Dharwar District in September 1928. The school had to be closed in February 1929 on account of the fall in attendance. In addition to the above schools, nine Weaving Demonstrators were maintained to demonstrate the use of flyshuttle looms and other improved appliances in small villages of different districts in the Presidency. Each cotton weaving demonstration is equipped with two flyshuttle looms on one of which the Demonstrator himself works and demonstrates the improved methods in hand-weaving while on the other he gives practice to villagers attending the demonstration. The weaving demonstrations are also peripatetic institutions like weaving schools and they are transferred from one village to another after about six months or more, as found necessary. During the year demonstrations were held at Savda, Raver, Mohal and Sangola in the Central Division; Mhaswad, Vita, Nippani, Yemkanmardi, Ranibennur, Tuminkatti, Nagral and Kolhar in the Southern Division; Bardoli, Chikhli, Bedwa, Samerkha, Pimplao and Alindra in the Northern Division.

Scholarships for Technical Training.—Three new scholarships for Research Work in Chemistry tenable in India were awarded during the year and all the three scholarships granted in 1927 were extended for another year. The procedure of deputing scholars for higher studies in Electrical Engineering at the Indian Institute of Science, Bangalore, was discontinued and new arrangements were made whereby the selected scholars are to take their practical training in the Workshops of the B. B. & C. I. Railway, the G. I. P. Railway, and the Works of

Messrs. Tata Sons, Limited. Accordingly two new scholarships in Electrical Engineering were awarded during the year and the scholars joined the two Railway Workshops mentioned above. The two scholarships in Electrical Engineering granted in 1927 were extended for another year. The scholars who were provided with special scholarships in Electrical Engineering for further higher training abroad in 1926 are under training in England and are reported to be doing well.

The expenditure incurred by the Department during the year was Rs. 77,600 as against Rs. 69,400 in 1927.

THE FACTORIES ACT

The number of factories subject to the control of the Indian Factories Act increased from 1,596 to 1,661. This increase was mainly due to the registration of small concerns employing about 20 persons each.

The number of factories that actually worked was 1,498 as compared with 1,426 in the preceding year. Of these 715 were perennial and 783 seasonal concerns. Two hundred and fifteen of the perennial and 676 of the seasonal factories were connected with the cotton industry. The increase in the number of factories was not accompanied by an increase in the number of operatives of whom there were 356,083 against 381,868 in the previous year. There was an increase of about 4 per cent. in the number of factories subject to the provisions of the Factories Act, while the decrease in the number of operatives was 6·7 per cent. This decrease is largely attributed to the strike in Bombay which lasted for about six months. The total number of operatives employed in cotton mills was 219,428 while the corresponding figure for the previous year was 245,509. The number of operatives employed in cotton ginning and pressing factories was 49,010 against 46,535 in 1927. This increase was the result of a better cotton crop in certain parts of the Presidency together with the erection of new ginning and pressing factories.

The total number of women employed in factories was 28,173 in Bombay City and 46,919 in the mofussil as compared with the corresponding figures of 34,571 and 45,584, respectively, in the preceding year. The number of children employed in Bombay City was 122 against 164 in the preceding year ; while in the mofussil the total number was 5,061 against 6,158 in 1927. The number of women employed showed a decrease of 6·3 per cent. and the number of children showed a decrease of 18 per cent. The small number of children employed in Bombay City is unprecedented. The increase in the number

of women employed in the mofussil was chiefly due to increased activity in the seasonal industries. Legislation and departmental action has led to an almost complete abolition of child labour irregularities in the Ahmedabad mills. The Bombay mills have for a considerable time practically ceased to employ children, while the mofussil figures show a reduction of about 1,100 to which Gujerat, and particularly Ahmedabad, has largely contributed. The Report records prosecution of four factories in respect of children and eleven for the irregular employment of women.

Additional inspections of seasonal factories have been organised in practically every area and the results are reflected in the prosecutions that have been instituted in the areas during the last five years.

In several instances inspectors have had to adopt special travelling measures in the detection of offences since it is a simple matter to watch the trains. A large number of these visits were surprise visits to outlying ginning factories and the need of them has been proved by the detection of irregularities in the employment of women and children which necessitated the institution of a number of prosecutions.

Sanitation and Ventilation.—Sanitary conditions in Bombay in large factories are reported to be satisfactory and departmental action has resulted in improvements in the smaller concerns. A fair standard is maintained in Ahmedabad under very difficult conditions. "It is very satisfactory to be able to record," says the Chief Inspector of Factories, "a steady improvement in the ventilation of factories and particularly so in Ahmedabad where considerable progress has been made in improving the atmospheric conditions in the mills by the installation of ventilating plants based on the evaporative cooling principle which has neutralised the effect of the climate and in several mills working conditions have been improved out of all recognition. The extent to which Ahmedabad has made progress can be realised when it is stated that 37 of the old spinning and weaving mills have spent over Rs. 9,97,000 in ventilating improvements. In Sholapur four mills have spent over Rs. 3,00,000 in such improvements. In Bombay, where climatic conditions are more favourable and where mills have been generally better designed, the progress has naturally not been as great. Several mills have however effected improvements. In the opinion of the Chief Inspector of Factories, considerably improved working conditions in the

weaving sheds could be cheaply effected by increasing air movement near the weavers.

Accidents.—A steady advance has been made in the fencing of machinery. The Inspectors report that the circular issued to ginning factories has led to improvements in these concerns, although the tendency to provide cheap fencing will take some time to be eradicated and constant attention is needed each year to maintain the fencing in a reasonably passable condition.

The total number of accidents during the year was 4,518 against 4,800 in 1927 and 3,984 in 1926. Of these, 39 were fatal, 1,060 serious and 3,419 minor. The year was fortunately not marked by any accident of a serious nature. The fatal accidents, even after making an allowance for the general strike in Bombay, were less than those in the previous four years, for which the figures were 82 in 1924, 50 in 1925, 49 in 1926 and 59 in 1927.

The railway workshops in Bombay reported 2,266 accidents. As stated in previous reports, the companies are extremely liberal in the treatment of accidents. It was felt, however, that a reduction could be effected by a stricter use of goggles in chipping operations and action has been taken to secure this. Safety Posters are in use, and the G. I. P. Railway authorities have produced an excellent 'Safety First' booklet dealing with general railway safety principles, which includes a useful chapter on workshops safety. The Safety Posters for the textile industry, produced by the Millowners' Mutual Insurance Association in co-operation with the Factory Department, were distributed to the mills soon after the cessation of the general strike. They have been generally well received and the Inspectors see that the lessons involved are driven home. "An incident in a mill," says the Chief Inspector, "showed that even if the posters were not appreciated from their true standpoint, the workpeople were appreciative of the benefit to them under the Workmen's Compensation Act. A worker after gazing at the poster illustrating the danger at the licker-in of a card asked a co-worker for an explanation. The reply was that if he lost his fingers like the man depicted in the illustration he would get Rs. 200 compensation.

An analysis of 1,016 railway workshop accidents was made to ascertain whether fatigue had any bearing on accident causation. Accidents were least numerous in the first hour of the day, although the accidents after the midday recess and in the last half hour were only slightly more. The accidents appear to

depend solely on the activity of the workmen and there was no evidence that fatigue was a contributory factor.

Housing.—Very little advance has been made in the direction of housing the factory hands. The Agent of the Asoka and Rajpur Mills in Ahmedabad, however, built 130 rooms to improved designs. " It is a moot point whether the housing of factory employees by the factory owners is altogether in the interests of labour," observes the Chief Inspector. " Yet decent housing is one of the chief needs of the working classes and, up to the present, the housing of employees by factory owners has, on the whole, been beneficial to the working classes. In several instances, however, operatives will not utilise the housing provided for them and housing provided by an occupier is utilised by operatives of other factories. One of the great needs of the Ahmedabad textile worker is better housing and the inculcation of sanitary habits. State housing in Bombay has not been a pronounced success, since many operatives prefer to live in their insanitary and overcrowded habitations."

Welfare Work.—The general strike upset the creche arrangements in the mills and much of the work of past years had to begin over again. The strike, too, affected the attitude of some Agents and Managers towards this aspect of welfare work. It is therefore satisfactory to record that not only were all previous existing mill creches in operation at the close of the year but two additional ones were started. In view of the distress arising out of the strike steps were taken to obtain the re-opening of the creches where a need appeared to exist.

Considerable doubt existed as to whether the working mothers really appreciated the facilities offered them, but this may be considered to have been dispelled by the experience during and after the strike which lasted from May to October. In September the average creche attendance was 124, in October 266, in November 316 and in December 304. At the close of the year 14 creches were in operation in the Bombay mills, costing about Rs. 1,700 per month to maintain. It must not be forgotten that they have been started at a time of acute financial depression, while new ground has had to be broken. The Mill Agents and Managers may therefore be considered to have made a fair contribution to remove the difficulties of working mothers in Bombay. The opium drugging of 108 infants was either stopped or prevented by means of the creches. Managers give facilities to nursing mothers to absent themselves from work to visit their infants. Promises to open additional

creches have been made, but the present unrest will probably delay the fulfilment.

In Ahmedabad 22 mill creches are in operation, while 8 other mills provide facilities which need improvement. The Sholapur mills have continued their interest in infant welfare. The creches in two of the mills have been handed over to the care of the Poona Seva Sadan.

Eight schools are maintained by the Ahmedabad mills. In Sholapur the mills maintain schools, while in Bombay compulsory education has been introduced by the Municipality in several wards.

Prosecutions.—Three hundred and twenty-six cases were instituted against 59 factories and convictions were secured in all cases except one.

THE WORKMEN'S COMPENSATION ACT

The Annual Report on the working of the Workmen's Compensation Act, 1923, for the year 1928 showed that returns under section 16 of the Act were received from 1,359 employers of which 1,303 returns were in respect of factories, six in respect of mines, two in respect of tramways, three in respect of Port Trusts and the remaining 45 were in respect of miscellaneous undertakings. These employers employed daily in factories 343,068 adults and 6,554 minors, in mines 31,680 adults and 13 minors, in tramways 3,685 adults only, in port trusts 2,914 adults and three minors and in other concerns 9,216 adults and 248 minors. The total number of accidents in all these concerns was 3,012 of which 58 were fatal accidents, 228 resulted in permanent disablement and the remaining 2,726 in temporary disablement. The total amount of compensation paid for all these accidents was Rs. 1,48,219 of which Rs. 47,407 was in respect of fatal accidents, Rs. 62,407 in respect of permanent disablement and Rs. 38,405 in respect of temporary disablement.

There were in all 329 cases for disposal as compared with 362 in 1927. Of these, 69 were in respect of fatal accidents for which compensation not having been deposited the dependants took action ; 130 applications related to accidents resulting in permanent disablement, and nine to temporary disablement ; while 112 applications were for distribution of compensation ; seven were for recovery of compensation not paid and the remaining two applications were of a miscellaneous character. Of the 329 applications 15 were transferred to other Commissioners, six were withdrawn, two were dismissed for non-appearance, two were summarily dismissed, 141 were admitted by the opposite party, three were allowed *ex-parte* and

130 were contested. Thirty remained undisposed of at the end of the year. Of the contested applications 35 were allowed in full, 75 in part and the remainder were dismissed.

During the year Rs. 1,63,913 were deposited of which Rs. 1,19,837 was for fatal accidents and Rs. 44,076 in respect of non-fatal accidents. The latter sum does not represent the whole of the compensation paid to workmen, because deposit under section 8 (2) is voluntary and, in many cases, compensation is paid out to the workmen after an order has been made, without payment into Court.

Two hundred and forty-five applications were filed for registration of agreements during the year. In addition there were 26 applications pending from the previous year. Of these 252 were disposed of and 19 were kept pending.

Compensation was awarded in 248 cases as against 273 in 1927. One of the cases was in respect of a fatal accident to a minor. Of the other cases, five related to temporary disablement, 102 to permanent disablement and the remaining 140 to fatal accidents.

There was a slight decrease in the number of applications for compensation in respect of permanent disablement and a marked decrease in the number of applications for distribution, although the number of other applications, including those for registration of agreements, remained the same. The decrease may probably be attributed to the general strike in the textile mills in Bombay City when about 150,000 men were unemployed for nearly six months. There was, however, a marked increase in the number of contested cases for which no particular reason can be assigned. An examination of the figures shows that the administration of the Act falls almost entirely on the Commissioner of Workmen's Compensation, Bombay, whose jurisdiction covers Bombay City and suburbs, Ahmedabad, Sholapur, Broach and the railways. Of the 281 cases filed, 241 were filed in his Court and only 40 cases were filed in the Courts of the *ex-officio* Commissioners.

BOMBAY BOILER INSPECTION DEPARTMENT

The number of boilers on the register at the end of the year was 5,902, an increase of 79, out of which 2,563 were inspected and certified by the Boiler Inspection Department. Thirteen cases of irregularities were discovered. The explanations given were accepted and in each case a warning was given. Eleven accidents to boilers of a minor character, with two exceptions, were investigated during the year. Two firemen were severely scalded by steam and boiling water and died of the injuries.

The receipts, excluding those on account of Engineers' Examination fees, for the year were Rs. 1,38,000 as against Rs. 1,44,000. The decrease is due in general to the lesser number of boilers offered for inspection in the Presidency.

Bombay being the largest and the most convenient port on the West of India for imports, new boilers not only for the Bombay Presidency but also for many other parts of India are landed here. The Agents of the Boiler Manufacturers and owners of boilers avail themselves fully of the great benefits derived from the present Indian Boilers Act which permits them to have their boilers inspected at Bombay and to receive certificates which are recognised in any other part of British India. This arrangement has effected great saving in expense, time and trouble to those concerned.

The Indian Boilers Act with the Rules and the Regulations thereunder is working satisfactorily and no hitch has occurred on the transference of boilers from the Bombay Presidency to other parts of India.

SEA-BORNE TRADE

In the introductory paragraphs of last year's report, it was remarked that the trade of Bombay, after a period of lean years, had turned the corner. Since then there has supervened a most disastrous period for the industry and commerce of Bombay. From March to October, there was a general strike of cotton mill operatives resulting in an enormous economic loss to the industry and in serious reactions on other business. Peace was declared in October but this was rather of the nature of a truce pending the issue of the findings of the Fawcett Committee which had been appointed to report, amongst other things, on the outstanding issues between owners and operatives. By the end of the year under report it was apparent that issue would again be joined and that a fight to the finish was imminent. The oil companies were also involved in prolonged labour troubles and the outbreak of a series of bloody communal riots in February bade fair to paralyse the economic and social life of Bombay. In the face of these facts, the trade figures of the present year appear almost paradoxical, marking as they do a further step, albeit a small one, towards trade recovery. The explanation of the paradox is found in the importance of its hinterland to the port and it may be concluded that with happier times in Bombay itself, the year would have shown, in decided fashion, a welcome revival of trade.

Imports of private merchandise declined in value from Rs. 86·39 crores to Rs. 84·14 crores due almost entirely to a reduction in imports of raw cotton. The imports of bullion further declined by Rs. 3·32 crores. The total trade in merchandise expanded by Rs. 14·3 crores, or 9 per cent.

Exports of Indian produce expanded by the very substantial figure of Rs. 18·46 crores, or 30 per cent. This increase was due almost entirely to an increase in the export of raw cotton which, as foreshadowed in last year's report, advanced by Rs. 16½ crores. The greater part of this increase went to Japan which increased her takings by 73,000 tons, thus almost recouping the reduction of 1927-28. China also was an important consumer and increased her takings by no less than 44,000 tons. Shipments of seeds also improved by the useful margin of Rs. 1·64 crore which marks an advance of nearly Rs. 6 crores on the figures for 1926-27. A result of the enforced idleness of the mills was the further decline in exports of cotton manufactures by over Rs. 79 lakhs making a total fall of Rs. 1½ crore from the figures of 1926-27. A further result of the strike is that it is still impossible to arrive at any evaluation of the effects of the measures to aid the industry adopted by the Government of India in October 1927 as a result of the Tariff Board's report.

The percentage distribution of India's trade among the various countries returned to normal. As a result of Japan's resumption of the import of Indian cotton, the United Kingdom's percentage receded from 28·12 to 25·68 which, however, was an advance of ½ on the percentage for 1926-27. Japan's percentage rose by a corresponding margin to 19·67. Trade with the Continent of Europe further improved from 26·27 per cent. to 27·67 per cent. America's share dropped from 7·17 per cent. to 5·16 per cent. owing largely to reduced imports of cotton from that country.

Excluding the abnormal increase in the export of raw cotton, the value of the total foreign trade of Bombay declined by about Rs. 5½ crores. The increase in the export of seeds was offset by a somewhat larger decrease in the re-export of foreign merchandise and the other contributing factors were a decline of Rs. 2¼ crores in the imports of merchandise and of Rs. 3¼ crores in imports of precious metals. The former decrease was partially accounted for by a general reduction in prices, but the decrease in takings of gold and silver was not compensated by a corresponding increase in takings of merchandise and was probably attributable to the diversion of South African

consignments from Bombay to Madras by reason of freight advantages.

The total trade of the Bombay Presidency was 264¼ crores of rupees, 5¾ crores more than in the previous year. These figures were made up as follows :—

Foreign Trade (private)—

Imports—108 crores 58 lakhs, a decrease of 5 crores 66 lakhs ;

Exports—86 crores 29 lakhs, an increase of 16 crores 71 lakhs ; a total foreign trade of 194 crores 87 lakhs, showing a gain of 11 crores 5 lakhs.

Coasting Trade (private)—

Imports—33 crores 48 lakhs, an increase of 54 lakhs ;

Exports—28 crores 99 lakhs, a decrease of 7 crores 86 lakhs ; giving a total coasting trade of 62 crores 47 lakhs, a net decrease of 7 crores 32 lakhs.

Adding to this figure Government transactions amounting to 6 crores 88 lakhs the total sea-borne trade amounted to 264 crores 22 lakhs, an increase of 5 crores 81 lakhs.

The gross revenue collected by the Bombay Custom House rose from Rs. 12 crores 49 lakhs to Rs. 12 crores 58 lakhs.

FOREIGN TRADE OF THE PORTS OF BOMBAY AND KARACHI

The following table shows the value to the nearest lakh of the Foreign Import and Export trade of the ports of Bombay and Karachi grouped according to classes shown in Government accounts :—

Imports

BOMBAY	Lakhs	Increase or decrease in 1928 29 Lakhs
Food, drink and tobacco	1,070	+ 52
Raw materials and produce and articles mainly unmanufactured	1,026	— 357
Articles wholly or mainly manufactured ..	6,129	+ 69
Living animals	19	+ 3
Postal articles not specified	168	+ 9
Total ..	8,412	— 224
KARACHI		
Food, drink and tobacco	740	+ 195
Raw materials and produce and articles mainly unmanufactured	173	+ 16
Articles wholly or mainly manufactured ..	2,181	+ 305
Postal articles not specified	58	— 5
Total ..	3,152	+ 511

Exports

BOMBAY *Indian Produce and Manufacture*	Lakhs	Increase or decrease in 1928 29 Lakhs
Food, drink and tobacco	349	+ 6
Raw materials and produce and articles mainly unmanufactured	6,615	+1,947
Articles wholly or mainly manufactured ..	802	— 97
Postal articles	103	— 10
Total ..	7,869	+1,846

KARACHI *Indian Produce and Manufacture*		
Food, drink and tobacco	546	— 198
Raw materials and produce and articles mainly unmanufactured	2,138	+ 201
Articles wholly or mainly manufactured ..	35	+ 4
Living animals	½	..
Postal articles	5	— 1
Total ..	2,724½	+ 6

BOMBAY *Foreign Merchandise*		
Food, drink and tobacco	34	— 38
Raw materials and produce and articles mainly unmanufactured	233	— 73
Articles wholly or mainly manufactured ..	225	— 78
Living animals	2	— 1
Postal articles	8	— 1
Total ..	502	— 191

KARACHI *Foreign Merchandise*		
Food, drink and tobacco	20	+ 2
Raw materials and produce and articles mainly unmanufactured	80	+ 17
Articles wholly or mainly manufactured ..	78	+ 19
Articles re-exported by post	..	..
Total ..	178	+ 38

Total Export, Bombay—8,371 lakhs, an increase of 1,655 lakhs.
Total Export, Karachi—2,902 lakhs, an increase of 44 lakhs.

CHIEF PORT—BOMBAY

Unlike Madras and Burma, the foreign trade of the Presidency proper is concentrated almost entirely in the chief port, Bombay. The aggregate value of the foreign trade (private) of Bombay increased by Rs. 11 crores to Rs. 195 crores or, if treasure be excluded, by Rs. 14 crores, or 9 per cent., to Rs. 168 crores. During the same period, the foreign trade of Calcutta improved by Rs. 2·19 crores, or nearly 1 per cent., to Rs. 224 crores and that of Karachi by Rs. 5½ crores, or 10 per cent., to Rs. 60½ crores. Imports of merchandise into Bombay fell by 2½ per cent., while those into Calcutta and Karachi improved by 4 per cent. and 19 per cent., respectively. Raw cotton, cotton twist and yarn, artificial silk, fruits and vegetables, tobacco and chemicals mainly accounted for the decrease at Bombay; while grain, pulse and flour machinery and millwork, spices and sugar were chiefly responsible for the increase at Calcutta and grain, pulse and flour, cotton manufactures, sugar, kerosene oil and machinery and millwork for the increase at Karachi. On the other hand, there were noticeable increases in cotton manufactures, motor cars, etc., and grain, pulse and flour at Bombay and large decreases of cotton manufactures at Calcutta and decreases of mineral oil (other sorts), tobacco and fruits and vegetables at Karachi.

Exports of Indian produce advanced by Rs. 18·46 crores, or 30 per cent., to Rs. 78·69 crores at Bombay and by Rs. 5·96 lakhs, or ·2 per cent., to Rs. 27·25 crores at Karachi. Calcutta recorded a decrease by Rs. 74·71 lakhs, or ·5 per cent., to Rs. 137 crores. Raw cotton, seeds, oilcakes, raw hides and skins, grain, pulse and flour and raw wool accounted for the marked increase at Bombay, and raw cotton, raw hides and skins and raw wool for the increase at Karachi, while tea, seeds, grain, pulse and flour and opium were responsible for the falling off at Calcutta. On the other hand while there were marked decreases of cotton manufactures, spices and myrabolams at Bombay and of grain, pulse and flour at Karachi, Calcutta showed noticeable increases in shipments of jute manufactures, raw jute and lac.

The total value of the private coasting trade, excluding treasure, fell by Rs. 6·9 crores to Rs. 55 crores. Imports improved but exports declined. Of the principal articles under imports, rice, raw cotton and jute manufactures showed increases while kerosene oil, seeds and coal declined. Under exports there were marked decreases in shipments of cotton manufactures, cotton twist and yarn and grain, pulse and flour.

FOREIGN TRADE

IMPORTS

In the year 1928-29 the total value of imported merchandise contracted by Rs. 2·24 crores to Rs. 84·12 crores. Despite this drop, which was due to a falling off in the imports of raw cotton, the hopeful prospects of the preceding year seemed to have been justified to a certain extent. The notable fall in raw cotton amounting to Rs. 2·85 crores in value, was accounted for by the return to more normal conditions in respect of the American crop and the consequently smaller receipts of American cotton. Other articles which contributed to the loss in imports were cotton twist and yarn, artificial silk, tobacco, fruits and vegetables, chemicals, coal, rubber, precious stones and pearls unset, and raw silk. On the other hand there were marked increases in value in cotton manufactures, machinery and millwork, motor cars and motor cycles, grain, pulse and flour, sugar, silk manufactures and instruments and apparatus.

The more important commodities are the subject of special remark in the subsequent paragraphs.

Coal.—Imports of foreign coal receded by 73,620 tons to 133,479 tons in quantity and by Rs. 19·92 lakhs to Rs. 25·53 lakhs in value owing to smaller arrivals from all the principal countries of supply. Receipts of Bengal coal also fell by 46,000 tons to 296,000 tons. This all round decrease in imports was probably due to the greater use of electric power in place of coal for industrial purposes, to the electrification of the local services by the G. I. P. and B. B. & C. I. Railways and, in a minor degree, to the prolonged strike in the Bombay Cotton mills. English coal prices were comparatively stable during the greater part of the year. The prices of Natal and Bengal coal were also fairly steady throughout the year.

Dyeing and Tanning Substances.—Imports under this head further improved from Rs. 1·84 crore to Rs. 1·86 crore mainly owing to large arrivals of coal tar dyes from Germany whose share in the total imports was 60 per cent. Receipts of alizarine dye, which amounted to 3,745,180 lbs. in quantity and Rs. 19·37 lakhs in value, recorded an improvement of 305,480 lbs. in quantity, but a contraction of Rs. 1·25 lakh in value. The despatches from Germany increased by 743,310 lbs. in quantity and Rs. 2·26 lakhs in value, while those from the United Kingdom fell by 141,633 lbs. in quantity and Rs. 1·59 lakh in value. Imports of aniline dye decreased by 29,731 lbs. to 10,661,959 lbs. in quantity, but advanced by Rs. 1·91 lakh to

Rs. 1·47 crore in value. Imports from Germany, Italy and the United Kingdom advanced, but those from the United States of America and Switzerland contracted, both in quantity and value.

Hardware.—This head covers a large variety of miscellaneous articles such as agricultural implements, other implements and tools, builders' hardware, domestic hardware, enamelled ironware, lamps, safes, stoves, gas mantles, etc. The value of the imports decreased by Rs. 3·24 lakhs to Rs. 1·6 crore, smaller arrivals being noticed from the United Kingdom and Germany whose despatches amounted to Rs. 47·52 lakhs and Rs. 61·33 lakhs as against Rs. 53·13 lakhs and Rs. 63·26 lakhs, respectively, in the previous year. Germany, however, continued to be the largest supplier, her share being 38 per cent. of the total imports. The share of the United Kingdom declined from over 32 per cent. to nearly 30 per cent. Imports from Japan increased slightly while those from the United States of America were practically stationary, their shares being 5 per cent. and 10 per cent., respectively, of the total imports.

Machinery and Millwork.—The total value of imports under this head rose by Rs. 91·18 lakhs to Rs. 5·22 crores. Out of the increase of Rs. 35·31 lakhs recorded under prime movers (other than electrical), Rs. 26·4 lakhs represent railway locomotives, etc., which were previously registered under "Railway plant and rolling stock," which head has been omitted from the import classification list with effect from 1st April 1928. Despite the local mill strike for the greater part of the year, imports of textile machinery rose by Rs. 15·64 lakhs to Rs. 1·77 crore mainly for the up-country mills. Increases were also recorded under refrigerating machinery, sewing and knitting machines, boilers and other sorts of machinery. On the other hand, receipts of electrical machinery and metal working machinery receded. Of the total imports, the share of the United Kingdom, by far the largest supplier, further declined from 79·1 to 74·6 per cent. and that of Germany from 7·7 to 7·5 per cent. The share of the United States of America, however, increased from 6·9 to 8·9 per cent.

Matches.—Imports of matches receded still further from 745,000 to 270,000 gross of boxes in quantity and from Rs. 7·83 lakhs to Rs. 2·74 lakhs in value, owing chiefly to reduced shipments from Sweden. Japan despatched 32,700 gross of boxes as against 5,000 gross of boxes in the preceding year. Sweden continued to be the chief source of supply, her share in the total imports being 76 per cent. as against 84 per cent. in the previous year. The decline in imports of matches was largely due to

the expansion of the Indian match industry and to the improvement in quality of Indian matches. As in the previous year, there were no imports of undipped splints, veneers and empty match boxes. Imports of matchwood for the manufacture of splints and boxes fell from 677,000 cubic feet valued at Rs. 13·28 lakhs to 550,000 cubic feet valued at Rs. 10·33 lakhs. The falling off was chiefly noticeable in the arrivals from Japan which shipped only 72,000 cubic feet as against 288,000 cubic feet in the preceding year.

Metals and Ores.—The British iron and steel industry was depressed throughout the year 1928, but during the last quarter signs of revival were apparent. One of the main reasons for the prolonged depression in the industry was continental competition which drove prices down. Another factor was the development of the Indian steel industry which, inspite of internal troubles due to labour strikes, had gone a great way to diminish imports of foreign iron and steel into India. Notwithstanding the above factors, the United Kingdom was able to despatch 12,000 tons more than her shipments in the previous year. The total receipts from the United Kingdom amounted to 138,000 tons in quantity and to Rs. 2·63 crores in value. Belgian imports declined by 900 tons to 92,000 tons in quantity, but advanced by Rs. 11·06 lakhs to Rs. 1·27 crore in value. Despatches from Germany and Luxemburg fell by 5,600 tons and 3,200 tons, respectively, while those from the United States of America and France advanced by 2,000 tons and 300 tons, respectively. The total imports of iron and steel recorded an increase of only 2,000 tons in quantity and Rs. 18·19 lakhs in value.

Imports of brass though falling by 8,000 cwt. to 266,000 cwt. in quantity, increased by Rs. 4·4 lakhs to Rs. 1·31 crore in value. Receipts of mixed or yellow metal for sheathing from the United Kingdom and France decreased by Rs. 4 lakhs and Rs. 1·26 lakhs, respectively, but those from Germany and Japan increased by Rs. 7·35 lakhs and Rs. 4 lakhs. The total imports showed a decrease of 3,000 cwt. in quantity, but an increase of Rs. 5·64 lakhs in value. Under copper, imports of sheets from Belgium fell by 15,980 cwt. in quantity and by Rs. 7·01 lakhs in value; while arrivals from Germany and the United Kingdom improved by Rs. 10·24 lakhs and Rs. 3·3 lakhs, respectively. The increase in German silver was due to larger supplies from Italy. Imports of aluminium circles decreased by 1,569 cwt. in quantity and by Rs. 6·52 lakhs in value as increases in supplies from France, the United States of America

and Switzerland were more than counterbalanced by decreases from the United Kingdom, Italy and Belgium. Imports of tin receded from 16,810 cwt. to 10,077 cwt. in quantity and from Rs. 31·84 lakhs to Rs. 15·89 lakhs in value owing to smaller arrivals from the Straits Settlements—the principal supplier.

Motor cars and motor cycles.—The value of the total trade in motor cars, cycles, commercial vehicles and parts and accessories expanded further from Rs. 1·83 crore to Rs. 2·63 crores. The imports of motor cars rose from 4,093 to 6,705 in number and from Rs. 1·12 crore to Rs. 1·49 crore in value. Arrivals of Canadian cars increased from 1,138 to 3,588 and those from the United States of America from 908 to 1,421. On the other hand imports from the United Kingdom declined from 1,240 to 1,164 cars. The average declared value of British cars fell further from Rs. 3,241 to Rs. 2,978. French and Italian shipments receded still further. Imports of motor cycles fell from 332 to 326, out of which 274 were despatched by the United Kingdom which is practically the sole supplier. Imports of commercial vehicles rose further by 2,303 to 4,254 in number and by Rs. 29·31 lakhs to Rs. 62·57 lakhs in value owing to larger arrivals from Canada and the United States of America. The despatches from the United Kingdom, however, contracted by 19.

Oils.—Imports of mineral oils from foreign countries fell by 4¼ million gallons to a figure of about 72 million gallons. The decrease was mainly accounted for by smaller arrivals of fuel oils consequent on the dislocation caused by the Bombay mill strikes in the year under review. Out of a total receipt of about 41 million gallons of fuel oil (8 million gallons less than in the previous year), Persia's share amounted to over 34½ million gallons, the Straits Settlements (including Labuan) and British Borneo being responsible for 2 million and 4 million gallons, respectively. Arrivals of kerosene oil, on the other hand, rose by 4¼ million gallons to 26¼ million gallons. This rise in imports was due to the competition brought about by the short-lived "oil war" which ended in August last and does not indicate an improvement in the trade. Of the total imports of over 26 million gallons, Persia and Georgia (Caucasus) despatched about 12 million gallons each. Imports of kerosene oil from Burma fell by 11 million gallons owing, it is said, to the fact that the grade of the oil was not sufficiently high to compete with the oil imported from foreign countries. Imports of foreign lubricating oils fell by 365,953 gallons in quantity and by Rs. 3·36 lakhs in value to 3,462,074 gallons in quantity and Rs. 41·33

lakhs in value. There were no imports from Sumatra during the year under review as against 866,865 gallons imported during the preceding year. This falling off was counterbalanced by the arrivals of over 300,000 gallons each from the United States of America and British Borneo in excess of the imports of the preceding year. The supply of petrol from Burma decreased by 180,000 gallons to 1,340,000 gallons. There were no imports of petrol from foreign countries.

Postal Articles not specified.—The five specified articles, viz.:—(1) gold and silver thread, (2) cinematograph films, (3) jewellery, (4) precious stones and (5) cigarettes are included under the relative heads in the general imports and excluded from this head. The total value of postal articles not specified further increased by Rs. 9·37 lakhs to Rs. 1·68 crore, of which the value of imports from the United Kingdom was Rs. 91·39 lakhs as against Rs. 89·93 lakhs in the preceding year. The number of parcels assessed at this port decreased from 231,828 to 223,841 and that of letter packets found to contain dutiable articles from 52,744 to 51,873. The duty collected on parcels, however, rose from Rs. 23·66 lakhs to Rs. 25·95 lakhs and the amount realised on letter packets from Rs. 9·65 lakhs to Rs. 10·03 lakhs. The increased return from parcels was probably due to the raising of the weight limit of parcels from 11 lb. to 20 lb.

Precious stones and pearls, unset.—Imports of precious stones, consisting mostly of diamonds, rose further from Rs. 53·98 lakhs to Rs. 57·12 lakhs owing to larger arrivals from Belgium, whose share was valued at Rs. 45·54 lakhs as against Rs. 35·08 lakhs last year. Arrivals of pearls decreased by Rs. 15·03 lakhs to Rs. 25·7 lakhs owing to smaller shipments from Muskat, Bahrein Islands and Other Native States in Arabia. There is reason to believe that importers are in the habit of undervaluing their consignments and that the trade is of much greater volume than the above figures would indicate.

Sugar.—The supplies of both beet and cane sugar in the world market were even more plentiful than in the preceding year owing to abundant crops in all the sugar-growing countries of the world, and the downward trend of prices continued during the year under review except during May and June when the lightness of stocks induced by heavy clearances from bonds during 1927-28 and the late arrivals of steamers bringing fresh consignments resulted in the cornering of supplies by a prominent Indian firm.

The total imports of sugar into British India rose by more than 100,000 tons, of which Bombay's share was a little over 25,000 tons. Java was again the chief source of supply to the

Bombay market, owing to Java prices being more favourable than those of other varieties, and receipts from that country further expanded from 159,000 tons to 193,000 tons. On the other hand, there was a further decline in the imports of beet sugar, which amounted to 6,000 tons as against 15,000 tons in the preceding year.

Tea.—Imports of foreign tea improved by 796,000 lb. to 5½ million lb. in quantity and by Rs. 3·84 lakhs to Rs. 43·87 lakhs in value. Arrivals of black tea from Java showed a marked improvement as they rose by 1,424,000 lb. to over 2 million lb. in quantity and by Rs. 8·87 lakhs to Rs. 13·21 lakhs in value. Imports from Ceylon also increased by 196,000 lb. to 916,000 lb. in quantity and by Rs. 1·67 lakh to Rs. 8·06 lakhs in value. Arrivals of green tea from China fell by ¾ million lb. to 2 million lb. in quantity and by Rs. 6·68 lakhs to Rs. 19·6 lakhs in value. Imports from Calcutta rose from 3½ million lb. to nearly 4½ million lb. in the year under review. Exports of Indian tea receded still further from 693,000 lb. to 408,000 lb. in quantity and from Rs. 8·02 lakhs to Rs. 4·29 lakhs in value, due mainly to smaller shipments to Kenya Colony and Persia. Re-exports of foreign tea also declined further by 98,000 lb. to 26,000 lb. in quantity and by Rs. 1·24 lakh to Rs. 21,000 in value.

Textiles—

Cotton, raw.—Imports of foreign cotton receded by 37,000 tons to 29,000 tons in quantity and by Rs. 2·85 crores to Rs. 3·89 crores in value as a result of the cheapness of price of Indian cotton and of the prolonged strikes in the Bombay mills. The receipts during 1928-29 though smaller than those during the preceding two years were larger than those during the three years 1923-24 to 1925-26. Imports from the United States of America fell by 38,000 tons to 12,000 tons, but those from the Kenya Colony advanced by 2,000 tons. Of the 15,500 tons of African cotton, only 552 tons were re-shipped—271 tons to the United Kingdom and 176 tons to Japan—the balance being apparently consumed by the Indian mills.

Cotton piecegoods.—The depression in the Lancashire cotton spinning and manufacturing industry continued during 1928 and internal competition was also more severe than ever. Buying for India was very irregular on account of an attempted ban on imports by dealers in Calcutta and the total shipments to this country were considerably less than last year. The takings of Bombay, however, showed an appreciable improvement owing chiefly to the prolonged mill strikes in this Presidency as a consequence of which and of an expected shortage in

Calcutta due to the attempted boycott, indentors ordered out more than their average requirements. Japan also took advantage of the situation and increased her shipments.

The total imports of piece-goods advanced by 12 per cent. in quantity and 9 per cent. in value as compared with the figures of the previous year and the volume of imports was greater than in any year since 1919-20. The total value of imported piece-goods (including fents) was Rs. 15·43 crores, towards which coloured piece-goods contributed Rs. 6·81 crores, whites Rs. 4·18 crores and greys Rs. 3·6 crores. These figures represent an advance of Rs. 1·33 crore on those of last year; coloured and whites recorded large increases of Rs. 67 lakhs and Rs. 53·34 lakhs, respectively, but the increase under greys was only Rs. 15·48 lakhs. The share of the United Kingdom in the total piece-goods trade rose from 65 to 66·4 per cent., while that of Japan fell from 22 to 21 per cent.

Under greys, the principal item was long cloth and shirtings, the bulk of which were supplied by Japan. Other important items were dhutis, saris and scarves and jaconets (including madapolams) which were almost wholly supplied by the United Kingdom. Imports of Japanese long cloth and shirtings increased by Rs. 14·43 lakhs to Rs. 2·03 crores while those of sheetings declined by Rs. 25·51 lakhs to Rs. 7·29 lakhs. The share of Japan in greys fell from 69 to 64 per cent. while that of the United Kingdom improved from 25 to 31 per cent. Of the total imports of whites, British supplies constituted 89 per cent. as against 85·5 per cent. in the preceding year. The principal varieties were (1) mulls, (2) long cloth and shirtings, (3) dhutis, saris and scarves, and (4) nainsooks, the bulk of which were despatched by the United Kingdom.

Of the total receipts of coloured piece-goods valued at Rs. 6·81 crores, the United Kingdom was responsible for Rs. 5·05 crores and Japan for Rs. 93 lakhs.

Cotton Yarn.—Imports of cotton yarn contracted by 8 million lb. to 20½ million lb. in quantity and by Rs. 73·82 lakhs to Rs. 2·97 crores in value. Arrivals from Japan declined further by 8 million lb. to 5¼ million lb. in quantity and by Rs. 92·09 lakhs to Rs. 95·1 lakhs in value owing to reduced shipments of higher counts, notably 31-40s., imports of which fell from 4½ million lb. to ½ million lb. Receipts from China decreased by 2 million lb. to 5 million lb. in quantity and by Rs. 10·91 lakhs to Rs. 55·62 lakhs in value. The fall of 778,000 lb. in quantity and Rs. 4·65 lakhs in value in the arrivals from Hongkong was counterbalanced to some extent by the increase

of 363,000 lb. in quantity and Rs. 4·5 lakhs in value in the imports from Italy. British yarn, on the other hand, improved by 2½ million lb. to 9½ million lb. in quantity and by Rs. 31·06 lakhs to Rs. 1·39 crore in value. Imports of mercerised cotton yarn fell by nearly 1½ million lb. in quantity and by Rs. 28·75 lakhs in value. Japan's contribution to this trade was 91 per cent., the balance being supplied by the United Kingdom. In the following table the production of yarn in the Bombay Presidency is compared with the imports from abroad. Although 89 per cent. of the production of the mills in the Bombay Presidency was of lower counts, the spinning of higher counts also showed a comparative improvement in the year under review.

(The figures are shown in millions)

	Yarn imported			Yarn locally produced		
	26s. to 30s.	31s. and upwards	Total yarn	26s. to 30s.	31s. and upwards	Total yarn
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
1924-1925	·63	15·55	27·31	50·48	19·85	474
1925-1926	·42	15·51	26·65	51·12	19·00	423
1926-1927	·25	15·54	28·28	56·51	30·41	512
1927-1928	·14	15·42	28·62	55·82	35·99	492
1928-1929	·12	9·31	20·60	44·47	34·01	330

The marked decrease in the imports of cotton yarn of lower counts was attributable to the effect of the protective duty and the consequent stimulation of Indian production and to the concentration of Japanese mills on the exports of piece-goods. On account of the mill strike in Bombay, the outturn of locally produced yarn showed a considerable falling off.

Silk.—Imports of raw silk fell by 133,000 lb. to 1,375,000 lb. in quantity and by Rs. 11·82 lakhs to Rs. 76·54 lakhs in value. Most marked were the smaller shipments from Hongkong which amounted to 162,000 lb. in quantity and to Rs. 8·78 lakhs in value as against 294,000 lb. in quantity and Rs. 17·24 lakhs in value in the preceding year. Supplies from China also declined by 69,000 lb. in quantity and by Rs. 5·87 lakhs in value. Italy, on the other hand, despatched 90,395 lb. valued at Rs. 3·8 lakhs as against 11,035 lb. valued at Rs. 42,000 in the previous year. Imports of silk yarn, noils and warps advanced by 693,000 lb. to 1,848,000 lb. in quantity and by Rs. 25·07 lakhs to Rs. 78·58 lakhs in value. All the principal supplying countries except China contributed to the improvement.

Imports of silk piece-goods, the most important item in the group, improved by nearly ½ million yards to over 17¼ million yards in quantity, but declined by Rs. 4·94 lakhs to Rs. 1·94 crore in value. Shipments from Japan increased while those from China, Hongkong and Germany fell off. Arrivals of silk mixtures improved by 286,000 yards to nearly 2¼ million yards in quantity and by Rs. 3·06 lakhs to Rs. 29·56 lakhs in value owing to larger imports from all the principal supplying countries except France.

Owing to the heavy losses suffered by the dealers in the artificial silk trade on account of excessive imports in 1927-28 at very high prices, a reaction set in as a result of which imports of artificial silk declined in the year under report. Receipts of yarn contracted by 819,000 lb. to 5¼ million lb. in quantity and by Rs. 26·95 lakhs to Rs. 95·17 lakhs in value. Arrivals of piece-goods of cotton and artificial silk improved by over 3½ million yards to 32 million yards in quantity, but declined slightly by Rs. 5·39 lakhs to Rs. 2·16 crores in value. Supplies of yarn were received chiefly from Italy, the United Kingdom, the Netherlands and Germany; while piece-goods were supplied by Italy, the United Kingdom, Switzerland, Japan, Germany and Austria.

Wool, Raw and Manufactured.—Imports of raw wool declined by 793,000 lb. to 3¼ million lb. in quantity and by Rs. 6·43 lakhs to Rs. 23·69 lakhs in value due to smaller receipts from all supplying countries, especially from the United Kingdom, Persia and Australia. Arrivals of yarn and knitting wool advanced owing mainly to supplies to the extent of Rs. 3·89 lakhs in value, having been received from China as against nil in the preceding year. Imports of woollen piece-goods, the most important item in this group, showed a decrease of Rs. 1·6 lakh owing to smaller receipts from the United Kingdom. Arrivals from Germany and Belgium, however, improved. The share of the United Kingdom, the principal source of supply, in the total imports declined from 58 to 53 per cent. Of the other manufactures of wool, blankets showed an increase, while carpets declined owing to smaller arrivals from all the supplying countries.

FOREIGN MERCHANDISE

EXPORTS

There was again a considerable falling off in the entrepot trade of Bombay despite the marked recovery noticed in the preceding year, and the total value of foreign merchandise re-exported declined by Rs. 1·91 crore to Rs. 5·02 crores. This result was

chiefly due to smaller re-shipments of raw hides and skins, cotton manufactures, raw cotton and sugar. Owing to the smaller demand from the United Kingdom re-exports of raw hides and skins, consisting almost entirely of Persian fur-bearing skins, fell by 105 tons to 326 tons in quantity and by Rs. 39·34 lakhs to Rs. 1·53 crore in value. The re-exports of cotton manufactures—mostly cotton grey piece-goods—declined by Rs. 35·71 lakhs to Rs. 71·96 lakhs owing to smaller demands from Iraq, Persia and Bahrein Islands. Raw cotton accounted for the fall of Rs. 35·47 lakhs due to reduced shipments to the United Kingdom, Italy and China and re-exports of sugar contracted by 11,445 tons to 4,008 tons in quantity and by Rs. 33·13 lakhs to Rs. 11·08 lakhs in value due to smaller re-shipments to Other Native States in Arabia, Bahrein Islands, Iraq, Muskat and Aden and Dependencies.

INDIAN PRODUCE AND MANUFACTURES

After a steady decline during the preceding four years, a very considerable improvement was visible in the export trade of Bombay in the year under review. The total value of exports of Indian produce and manufactures exceeded that of the previous year by Rs. 18·46 crores and rose to Rs. 78·7 crores. This notable rise was chiefly due to larger shipments of raw cotton, the great staple of Bombay's export trade, seeds, oilcakes, raw hides and skins, grain, pulse and flour and raw wool. Exports of cotton manufactures, however, declined. Exports of oilcakes improved by Rs. 46·47 lakhs to Rs. 1·9 crore as a result of larger shipments of groundnut cake to the Netherlands and Belgium and of linseed cake to the Netherlands and Germany. Shipments of tobacco unmanufactured showed a slight rise of Rs. 69,000. On the other hand, exports of spices declined from Rs. 69·54 lakhs to Rs. 48·43 lakhs by reason of reduced shipments of pepper to the Straits Settlements, Egypt, the United States of America and the United Kingdom. The decrease of Rs. 20·75 lakhs in myrabolams is accounted for by smaller shipments to the United Kingdom and the United States of America.

Grain, Pulse and Flour.—The principal items under this head are wheat, wheat flour, rice and jowar and bajri. Exports of wheat improved by 1,816 tons to 3,652 tons in quantity and by Rs. 2·44 lakhs to Rs. 7·56 lakhs in value. The United Kingdom's takings were 1,400 tons as against nil in the previous year. The decrease in exports of wheat flour amounting to 4,000 tons in quantity and Rs. 7·76 lakhs in value was due to smaller despatches to all the principal purchasing countries.

Exports of rice declined from 20,000 tons to 17,000 tons in quantity and from Rs. 49·58 lakhs to Rs. 42·76 lakhs in value owing to smaller demands from all buying countries except Kenya Colony. Exports of jowar and bajri advanced by 23,000 tons to 42,000 tons in quantity and by Rs. 34·22 lakhs to Rs. 66·32 lakhs in value as a result of increased shipments to Italian East Africa, Aden and Dependencies and Other Native States in Arabia. Shipments of other food grains showed slight improvement.

Hides and Skins (Raw and Tanned).—The improvement in the exports of raw hides and skins recorded last year was maintained in the year under report. Exports of raw hides advanced by 1,100 tons to 1,675 tons in quantity and by Rs. 24·23 lakhs to Rs. 33·68 lakhs in value owing to better trade with Germany which took 1,496 tons as against 523 tons in the previous year. Shipments of tanned hides, however, declined by 396 tons to 1,218 tons in quantity and by Rs. 11·46 lakhs to Rs. 46 lakhs in value due entirely to smaller takings by the United Kingdom. Exports of raw skins improved by 683 tons to 4,878 tons in quantity and by Rs. 16·3 lakhs to Rs. 88·01 lakhs in value, chiefly owing to increased demands from the United States of America. Shipments to the United Kingdom declined by 173 tons in quantity and by Rs. 6·07 lakhs in value. Exports of tanned or dressed skins showed a slight improvement, smaller despatches to the United Kingdom being more than counterbalanced by larger shipments to the United States of America.

Metals and Ores.—The principal item under this head is manganese ore exports of which from the whole of British India fell from 704,000 tons to 681,000 tons in the year under review. While Bengal and Madras sent 25,000 tons and 4,600 tons less, respectively, Bombay improved its share by 7,000 tons owing to larger shipments to France which took 142,000 tons as against 70,000 tons in the previous year. Shipments to Belgium decreased by 31,000 tons and those to the United Kingdom and the United States of America by 26,000 tons and 10,500 tons, respectively.

Seeds.—Next to raw cotton, the most important item in the export trade of Bombay is oilseeds. The British oilseed crushing and extracting industry had rather a better year than in 1927. Supplies of practically all kinds of oilseeds were ample to cover requirements and a considerably increased quantity of seed was dealt with in the mills as a result of the stronger demand for oil cakes and meals on both home and export account.

Bombay's exports expanded from 484,000 tons to 535,000 tons in quantity and from Rs. 9·38 crores to Rs. 11·01 crores in value. Groundnuts, sesamum and rape seed recorded increases, while castor seed, linseed and cotton seed showed decreases. The further increase in groundnuts was striking, and justified the additional acreage sown. Shipments advanced by 61,000 tons to 203,000 tons in quantity and by Rs. 1·55 crore to Rs. 5·06 crores in value, the United Kingdom and all principal Continental countries proving good customers. The increase in exports of sesamum was due to better trade with Italy, the United Kingdom and the Netherlands, and that in rape seed was due to larger demands from Italy and the United Kingdom. On the other hand, exports of castor seed declined by 20,000 tons to 71,000 tons in quantity and by Rs. 43·85 lakhs to Rs. 1·46 crore in value mainly owing to smaller demands from the United States of America and the United Kingdom. Exports of linseed fell by 9,000 tons to 80,000 tons in quantity and by Rs. 16 lakhs to Rs. 1·74 crore in value owing chiefly to a falling off in demand from Italy, smaller takings by Germany, the Netherlands and Belgium being counterbalanced by larger despatches to the United Kingdom, France and Spain. The decrease in exports of cotton seed was the result of reduced despatches to the United Kingdom which took 16,000 tons less than her takings in the previous year.

Textiles—Cotton, Raw.—The position of the Bombay cotton market during 1928-29 was in many respects better than that during the preceding year. There were no wide fluctuations, nor was the disparity between the highest and lowest prices so great as in the previous year. Despite large stocks in the local market, speculators were willing to pay heavy premia for new crop contracts in anticipation of a rise in the future, a short American crop having been reported. This was finally estimated at 14,373,000 bales of 500 lb., equivalent to 17,966,000 Indian bales of 400 lb. each. This figure, though considerably higher than that of the preceding year, was considered to be insufficient to meet the world-demand. The Indian crop of 1927-28 was estimated at 5,480,000 bales and a large new crop was expected despite the widespread damage to the Gujarat crop by the cold wave in January 1929.

Exports of cotton from Bombay improved from 312,382 tons to 479,808 tons in quantity and from Rs. 31 crores to Rs. 47½ crores in value. The notable increase of 167,000 tons was chiefly accounted for by Japan and China taking 73,000 tons and 44,000 tons, respectively, more than in 1927-28. Shipments to

other buying countries also improved. Stocks in Bombay at the end of March 1929 amounted to no less than 1,188,000 bales as compared with 925,000 bales at the end of the previous year.

Cotton Manufactures.—A matter of considerable interest in the past year was the publication of the report of the Trade Mission appointed by the Government of India to investigate the possibilities of development of foreign markets for India's piece-goods and yarns. The recommendations of the Mission are still under the consideration of the Government of India.

During the year, production of both cotton piece-goods and cotton yarn was practically stopped for nearly 5½ months on account of the mill strike in Bombay, with the result that the considerable stocks of piece-goods held by local mills were appreciably reduced.

The Gulf ports and East Africa are the principal markets for Indian cotton piece-goods. The total shipments during the year fell by 18 million yards to 107 million yards in quantity and by Rs. 72 lakhs to Rs. 3·17 crores in value, mainly accounted for by reduced shipments of coloured piece-goods to Iraq, Persia, Aden and Dependencies, Egypt, Ceylon, Zanzibar and Pemba and Portuguese East Africa. Shipments to Muskat Territory and Trucial Oman, Other Native States in Arabia, Tanganyika Territory, Siam and Bahrein Islands, however, showed appreciable increases. Smaller demands from Portuguese East Africa, Egypt, Mauritius and Dependencies, Kenya Colony, Zanzibar and Pemba, Iraq, Italian East Africa and Persia were responsible for the decrease in greys ; shipments to Aden and Dependencies, Siam, Anglo-Egyptian Sudan, Tanganyika Territory and Other Native States in Arabia, however, showed improvement.

Coloured piece-goods constituted 84 per cent. and greys 15 per cent. of the export trade. Comparative figures are shown in the accompanying table.

Exports of piece-goods (in lakhs of yards)

	Grey		Coloured	
	Indian	Foreign	Indian	Foreign
1921-22	238	469	1,024	109
1922-23	305	512	898	126
1923-24	330	404	920	107
1924-25	437	317	984	119
1925-26	369	152	828	98
1926-27	193	112	1,295	97
1927-28	174	155	1,065	106
1928-29	157	67	900	106

It will be seen that re-exports of foreign grey piece-goods decreased markedly.

Cotton Yarn.—The position in the yarn market continued unsatisfactory throughout the year owing to the strike in the local mills. The large stocks with the mills were consequently diminished and reached the lowest figure in October 1928 when the strike came to a close. Thereafter there was a practical equilibrium of demand and supply and stocks remained at a low figure.

Shipments of yarn fell by over 200,000 lb. to 24 million lb. in quantity, but improved by Rs. 8·52 lakhs to Rs. 1·93 crore in value. The decrease in quantity was mainly due to smaller despatches to Egypt and European Turkey. Shipments to Hongkong, on the other hand, advanced by 1¼ million lb. to nearly 2 million lb. in quantity and by Rs. 8·57 lakhs to Rs. 12·93 lakhs in value. Shipments to Aden and Dependencies, Iraq and Siam also improved.

Wool, Raw.—Exports of raw wool improved by nearly 4 million lb. to over 23 million lb. in quantity and by Rs. 32·95 lakhs to Rs. 2·04 crores in value mainly owing to larger despatches to the United States of America, the United Kingdom and Belgium.

TRADE ACCORDING TO COUNTRIES

The United Kingdom continued to maintain pride of place, which she regained in the year 1926-27 at the expense of Japan. Her share, however, declined from 28·12 to 25·68 per cent. This fall was the result of reduced imports from the United Kingdom and increased takings of raw cotton by Japan. The proportionate share of Continental Europe improved from 26·27 to 27·67 per cent., but America's share declined from 7·17 to 5·16 per cent. owing to reduced shipments of raw cotton.

Under imports the United Kingdom's figure fell by Rs. 17·18 lakhs to Rs. 31·54 crores, owing mainly to smaller shipments of tobacco, wool manufactures, artificial silk, kerosene oil and metals (brass), although despatches of cotton piece-goods advanced appreciably. Imports from other British possessions, however, advanced by Rs. 80·67 lakhs to Rs. 7·77 crores as a result of larger receipts of wheat from Australia, motor cars, motor cycles and motor omnibuses from Canada and raw cotton from Kenya Colony, though imports of tin from the Straits Settlements and of coal from Natal declined. Imports from foreign countries in Europe advanced by Rs. 42·21 lakhs to

Rs. 21·34 crores owing to larger arrivals of kerosene from Georgia, unspecified articles by post from Switzerland, artificial silk piece-goods from Italy, iron and steel and precious stones from Belgium and brass and copper from Germany, though there were noticeable decreases in the imports of artificial silk piece-goods and cotton manufactures from Switzerland, of artificial silk yarn from Italy and of artificial silk piece-goods from Germany. Among foreign countries in Asia, imports from Japan declined from Rs. 8·67 crores to Rs. 7·83 crores owing chiefly to reduced shipments of cotton twist and yarn and of rice, though despatches of cotton and artificial silk piece-goods and of cotton coloured piece-goods showed improvement. Imports from China fell by Rs. 26·25 lakhs to Rs. 2·51 crores owing to smaller shipments of cotton twist and yarn and other principal articles of supply. Larger arrivals of sugar account for the appreciable increase of Rs. 74·78 lakhs in the total imports from Java.

Under exports, Japan continued to occupy the first place, and her share improved from 26·25 to 30·09 per cent., as a result of her heavy purchases of raw cotton. The United Kingdom comes next with a percentage of 13·81 as against 17·05 in the previous year though despatches of seeds, raw cotton and raw wool to that country exceeded last year's shipments. Among other countries, the shares of Germany, Italy and Spain improved by reason of larger shipments of raw cotton and seeds, while the improvement in the share of Belgium was due to larger shipments of raw cotton.

Treasure.—Despite a considerably larger balance of trade in merchandise in favour of India, *viz.*, Rs. 86 crores as against Rs. 82 crores in 1927-28, imports of treasure on private account dropped further from Rs. 27·85 crores to Rs. 24·45 crores. Imports of both gold and silver declined, the former by Rs. 2·24 crores to Rs. 13·26 crores and the latter by Rs. 1·07 crore to Rs. 11·02 crores. Arrivals of gold bullion fell by Rs. 45·47 lakhs to Rs. 10·34 crores ; there were smaller arrivals from the United States of America, Egypt and Western Australia, but shipments from the United Kingdom and New Zealand advanced by Rs. 67·19 lakhs and Rs. 16·73 lakhs, respectively. New South Wales despatched Rs. 8·37 lakhs worth in the year under review as against none in the preceding year. Imports of

sovereigns also declined further by Rs. 1·77 crore to Rs. 2·53 crores, due to reduced shipments from Natal, the United Kingdom and Western Australia, though receipts from South Australia, and other Native States in Arabia were higher by Rs. 32·77 lakhs and Rs. 25·1 lakhs, respectively. The small decrease of Rs. 1·15 lakh in other coined gold was mainly due to smaller receipts of gold dollars from the United States of America. Receipts of gold coins from Iraq advanced by Rs. 21·36 lakhs worth. The fall in imports of silver was due to a drop of Rs. 89·96 lakhs in bar and of Rs. 7·6 lakhs in Government of India rupees. The marked increases of Rs. 1·54 crore and Rs. 75·57 lakhs in despatches of bar from the United Kingdom and Egypt, respectively, were more than counterbalanced by heavy decreases of Rs. 2·4 crores and Rs. 81·38 lakhs in the receipts from the United States of America and France. The decrease of Rs. 7·6 lakhs under Government of India rupees was due to smaller arrivals from Iraq, Other Native States in Arabia and Bahrein Islands. Mauritius sent Rs. 7·68 lakhs as against none in the previous year. The fall of Rs. 10·14 lakhs in other coins was a result of no receipts from Italy as against Rs. 18·8 lakhs in the preceding year.

Exports of gold on private account were insignificant, while those of silver advanced further by Rs. 15·94 lakhs to Rs. 2·56 crores owing to larger shipments of bar to China which more than counterbalanced the smaller despatches of Government of India rupees to Mauritius and Bahrein Islands.

There were no imports or exports of gold on Government account. Imports of silver were practically nil, while exports amounted to Rs. 1·7 crore as against Rs. 4·71 lakhs in the previous year, owing to larger shipments of bar to the United Kingdom.

SHIPPING

The total number of vessels engaged in the foreign trade decreased from 1,402 to 1,383, but the total net tonnage increased from 4,539,175 to 4,903,606. Steamers numbered 1,179 of the burthen of 4,881,948 as against 1,161 of 4,512,381 tons in the previous year. The average net tonnage of the steamers which entered the port with cargo was 4,066 as against 3,853 in the preceding year. Sailing vessels consisted entirely of "Native Craft" engaged in trade with ports in the Persian Gulf, Arabia and East Africa.

TRADE ACCORDING TO COUNTRIES

COASTING TRADE

The coasting trade excluding treasure between the chief port—Bombay—and other ports in India grouped by Provinces is summarised in the following statement :—

(In lakhs of rupees)

	Imports			Exports		
	1927-28	1928-29	Increase or decrease	1927-28	1928-29	Increase or decrease
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
British ports within the Presidency ..	143	143	..	291	220	— 71
Indian ports not British within the Presidency.	798	972	+174	431	376	— 55
British ports in other Presidencies ..	1,820	1,717	—103	2,469	1,824	—645
Indian ports not British in other Presidencies.	123	138	+ 15	123	117	— 6
Grand Total ..	2,884	2,970	+ 86	3,314	2,537	—777

Imports from coast ports into Bombay consist almost entirely of articles of Indian produce which are intended partly for consumption in the Presidency and partly for re-export to foreign countries.

The total imports into Bombay improved by Rs. 86·29 lakhs to Rs. 29·7 crores due to increased arrivals of grain, pulse and flour, raw cotton, jute manufactures and tea, black—the first two of which were the most important items. Imports of grain, pulse and flour increased by Rs. 1·07 crore to Rs. 7·2 crores owing to larger arrivals of rice from Burma. Imports of raw cotton advanced by Rs. 29·81 lakhs to Rs. 8·64 crores owing to larger shipments from Kathiawar and Cutch ; while shipments from Sind, Southern Maratha Country *via* Goa and Madras decreased. Jute manufactures and tea improved owing to increased imports from Bengal. On the other hand decreases were noticed in the receipts of kerosene oil from Burma. Imports of seeds decreased owing to reduced shipments from Kathiawar and Madras. The decline in imports of raw wool was mainly due to reduced shipments from Kathiawar and Cutch. Imports of coal from Bengal and teak wood from Burma also declined.

Exports from Bombay to coast ports fell by Rs. 7·77 crores to Rs. 25·37 crores owing to reduced shipments of both

Indian produce and foreign merchandise. Exports of Indian merchandise, which formed over 70 per cent. of the total export trade, declined by Rs. 6·64 crores to Rs. 17·91 crores owing to reduced shipments of cotton piece-goods, raw cotton, cotton twist and yarn and grain, pulse and flour. Exports of cotton piece-goods declined by Rs. 4·11 crores to Rs. 8·58 crores owing to smaller shipments to Sind, Bengal, Burma and Madras. The decreases of Rs. 1·4 crore and Rs. 10·66 lakhs under cotton twist and yarn and raw cotton, respectively, were due to reduced shipments of the former to Bengal, Burma and Madras and of the latter to Bengal, Madras and Pondicherry. The decrease under grain, pulse and flour was accounted for chiefly by smaller shipments of rice to British ports within the Presidency, Kathiawar and Goa. Re-exports of foreign merchandise fell by Rs. 1·13 crore to Rs. 7·46 crores chiefly owing to smaller re-shipments of cotton piece-goods to Madras, Kathiawar and Sind, of cotton twist and yarn to Madras, of sugar to British ports within the Presidency and Kathiawar, of metals and ores to Madras and British ports within the Presidency, of fruits dried, salted, etc., to Burma and of kerosene oil to British ports within the Presidency. Re-shipments of cotton piece-goods to Travancore showed an appreciable improvement.

SUBORDINATE PORTS OF THE BOMBAY PRESIDENCY

FOREIGN TRADE

The foreign trade of the subordinate ports of the Presidency is insignificant. Imports, which consisted chiefly of dates from Iraq, declined from Rs. 2·63 lakhs to Rs. 1·8 lakh. Receipts of other dried fruits from Portuguese East Africa, however, improved from Rs. 3,159 to Rs. 34,786. Exports amounted to Rs. 9,556 as against nil last year owing mainly to shipments of jowar and bajri to Other Native States in Arabia.

COASTING TRADE

The total value of the coasting trade of the subordinate ports decreased by Rs. 25·45 lakhs to Rs. 7·38 crores. Imports declined by Rs. 31·2 lakhs to Rs. 3·77 crores, but exports improved by Rs. 5·76 lakhs to Rs. 3·61 crores. Forty-nine per cent. of the total trade of the subordinate ports is with the chief port, Bombay.

THE TRADE OF SIND

The aggregate value of the entire maritime trade of the Province of Sind for the year 1928-29 increased by Rs. 140

lakhs or 2 per cent. to Rs. 7,789 lakhs. This total would have been considerably greater, but for a heavy reduction in exports of raw cotton and imports of cotton goods coastwise to and from Bombay respectively owing to the labour troubles there.

CHIEF PORT—KARACHI

In the foreign trade, which totalled Rs. 6,350 lakhs or 7 per cent. more than last year, exports at Rs. 2,924 lakhs showed an increase of Rs. 47 lakhs or 2 per cent., while imports were up by Rs. 371 lakhs, the total being Rs. 3,425 lakhs, and the increase no less than 12 per cent. as compared with the previous year. These figures contrast somewhat sharply with the deep depression so prevalent in commercial circles in Karachi. Owing to the partial failure of the crops, exports of wheat were small, but the exports of cotton were the second highest on record, while the quantities of wool and raw hides and skins shipped were only exceeded twice previously. As regards imports, the figures for iron and steel, mineral oils, woollen goods and motor vehicles established a new high record, and sugar imports were not far below the total for 1926-27, the record year. In fact the total volume of the import trade is a record in the history of the port, the excess of value in 1920-21 being due to higher prices. The widespread pessimism referred to above must therefore be ascribed to the keenness of competition coupled with the diversion of trade, not to other ports, but to new channels based on Karachi.

Bearing in mind the approaching completion of the Sutlej valley and Sukkur barrage irrigation projects, and the great quantities of surplus produce which must then be available for export, and considering also the additional imports required to meet the wants of the population in the new irrigated areas, a very large increase in the trade of Karachi in the near future seems to be assured. Meanwhile, the far from unsatisfactory present volume of trade has the undoubted advantages arising from a stable exchange.

It is noteworthy that whereas the value of imports of private merchandise from foreign countries into Karachi improved by Rs. 511 lakhs, the corresponding figures for Bombay record a decline of Rs. 227 lakhs.

Notes on the changes in the value and volume of important articles in the trade are given below :—

IMPORTS

Chemicals, Drugs and Medicines.—After a substantial advance of Rs. 5·72 lakhs in the previous year, the total value

of imports under this head declined slightly by Rs. 86,395 to Rs. 41·86 lakhs to which chemicals contributed Rs. 28·79 lakhs and drugs and medicines Rs. 13·07 lakhs. The United Kingdom continued to hold its own against foreign competition in the supplies of heavy chemicals.

Coal.—Imports of coal, mainly for bunkering purposes, suffered a considerable set-back. A slack export season and more oil-burning steamers were the principal factors which contributed to the total decrease of 26,790 tons. Purchases of foreign coal declined by 5,567 tons to 25,256 tons in quantity and by Rs. 1·72 lakhs to Rs. 5·55 lakhs in value. Almost all the principal exporting countries sent less. The bulk of the foreign coal again came from Natal, and the deficiency of 4,863 tons in arrivals therefrom was partly made up by an increase of 1,975 tons in despatches from Portuguese East Africa. Supplies from the United Kingdom contracted by 2,123 tons. Purchases of Bengal coal suffered the most, the quantity having receded by 21,223 tons to 128,406 tons and its value by Rs. 6·74 lakhs to Rs. 23·81 lakhs.

Cotton Twist and Yarn.—Imports of cotton twist and yarn, which fell progressively from 1,221,653 lbs. in 1924-25 to 828,841 lbs. in 1925-26, 744,347 lbs. in 1926-27 and 693,172 lbs. in 1927-28 declined further to 439,099 lbs. during the year under report. The decrease was most noticeable in receipts of coloured yarn Nos. 31 to 40 from the United Kingdom, and was the result of increased consumption of yarn dyed in factories in the Bombay Presidency, the latter being found to be cheaper than foreign dyed yarns. The specific duty of 1½ annas per lb. imposed last year led to restricted imports of heavily weighted foreign yarns. Imports of white yarn, almost wholly from the United Kingdom, on the other hand, increased from 57,155 lbs. in 1927-28 to 127,905 lbs. in 1928-29.

Cotton Yarn and Manufactures.—The year's record showed a substantial advance of 15 per cent. in both the volume and value of imports of cotton goods over the figures recorded in the previous year. Light stocks held at the commencement of the year, coupled with a good demand, both local and up-country, stimulated imports, and also encouraged dealers to enter freely into forward commitments. The increase in the demand from upcountry was also attributable to the imposition of restrictions on the importation of certain classes of goods into Calcutta by the Marwadi Chamber of Commerce, which resulted in the diversion to this port of some business, chiefly from the Delhi and Cawnpore markets, that would ordinarily have passed

through Calcutta. The continuous mill strikes in Bombay also helped the disposal of foreign goods, a fact borne out by the recorded figures, which show that, while imports of Indian piece-goods from Bombay decreased by 40 million yards in quantity and Rs. 122 lakhs in value, those from foreign countries expanded by 50 million yards and Rs. 133 lakhs. The spurt created by the above conditions was, however, not long sustained, and the boycott movement started during the latter part of the year, together with the closing of the Afghan markets had a considerable adverse effect on trade. Prices of grey goods, which soared for a time, suffered the most, and those of coloured goods also declined considerably. The demand from Persian markets continued poor throughout the year. That country now obtains most of its requirements from Russia, which offers its goods at lower prices with easier facilities for payment.

Cutlery, Hardware, Implements and Instruments.—The bulk of the cutlery imported came from Germany, and its total value, *viz.*, Rs. 5·28 lakhs fell slightly by Rs. 11,808 as compared with the previous year. The total value recorded under hardware advanced by Rs. 13·76 lakhs to Rs. 52·32 lakhs during the year under report. Among the principal descriptions, the value of builders' hardware comprising locks, hinges, door bolts, etc. rose by Rs. 1·82 lakhs to Rs. 7·48 lakhs, to which Germany contributed Rs. 3·15 lakhs, Sweden Rs. 2·45 lakhs and the United Kingdom Rs. 1·65 lakhs. Imports of metal lamps, which suffered a heavy set-back last year, made a complete recovery. The total value, which amounted to Rs. 9·53 lakhs, showed an excess of Rs. 3·97 lakhs over the value recorded in the previous year, and was the highest in the quinquennium. Most of the lamps were from Germany and the United States of America. The total value of implements and tools, other than agricultural implements and machine tools, also increased from Rs. 8·20 lakhs to Rs. 10·23 lakhs, chiefly in supplies from Germany and the United States of America. The aggregate value of instruments and apparatus expanded by Rs. 10·62 lakhs to Rs. 36·95 lakhs, 50 per cent. of which represented imports of electrical instruments. Among the remaining items, imports of wireless apparatus are worth notice, the total value having risen from Rs. 13,904 in 1927-28 to Rs. 2·10 lakhs in 1928-29, chiefly in receipts from France.

Grain, Pulse and Flour.—Imports under this head, which are ordinarily insignificant, assumed considerable proportions, their total value having expanded from Rs. 90,019 in 1927-28

to Rs. 153·72 lakhs during the year under report. The partial failure of the Indian wheat crop necessitated heavy imports from Australia, which sent no less than 103,426 tons of this commodity of the total value of Rs. 148·89 lakhs. There was also a small consignment from Kenya Colony, consisting of 2,081 tons valued at Rs. 3·12 lakhs.

Machinery.—A greater demand from industrial concerns, both in Sind and the Punjab, stimulated somewhat by the removal of the import duty, brought about an improvement of Rs. 21·23 lakhs or 17 per cent. in the total value of machinery, amounting to Rs. 146·19 lakhs.

The expansion under mining machinery is particularly striking, and was due to arrivals of large consignments for the Attock Oil Company. The principal supplies came from the United Kingdom and the United States of America.

Prime-movers, other than locomotives, largely comprised oil engines, mainly British. While the number of these engines rose by 142 or 47 per cent. to 441, their value increased only by Rs. 75,085 or 7 per cent. as compared with the previous year. This anomaly was due to increased importations of engines of a smaller type, made in response to a rising demand for small units for grinding cereals and pumping water. The value of imports of electrical machinery advanced by Rs. 1·54 lakhs to Rs. 24·79 lakhs, notable advances in receipts occurring in generators, alternators and dynamos from the United Kingdom, which were required for private and public lighting installations. The decrease of Rs. 3·81 lakhs in the value of railway locomotive engines and tenders and parts is ascribed partly to smaller requirements by the Jodhpur Bikaner Railway and partly to reduced purchases by local and upcountry dealers, who supply to the North-Western Railway. Imports of sewing and knitting machines again suffered a set-back, the number received being 31,593 as against 33,585 last year. The decrease was almost wholly due to reduced purchases from the United Kingdom, which sent 17,856 machines as against 22,835 in 1927-28. German machines, on the other hand, came in larger numbers, *viz.*, 13,512 against 10,614 in 1927-28. The sale of the latter is on the increase on account of their cheapness. The number of typewriters, imported during the year, increased from 1,831 to 2,066, of which no less than 1,925 were American machines.

Metal and Metal manufactures.—Imports of iron and steel last year reached the then unprecedented level of 122,067 tons of the total value of Rs. 196·53 lakhs, and in view of a certain amount of overtrading during that year, it was feared

that the volume of business in the year under review would not come up to that level, but contrary to expectation, the iron and steel trade witnessed another year of healthy expansion, the total imports recorded, *viz.*, 127,375 tons valued at Rs. 205·36 lakhs having actually surpassed last year's figures by 4 per cent. in both quantity and value. The progress was at first slow: large unsold stocks and high prices on the Continent did not permit of business being done to any great extent in the first few months of the year, but a brisk demand, especially from up-country, later on caused the accumulated stocks to move into consumption. The output in the Tata Iron and Steel Works suffered a considerable set-back owing to strikes, and in consequence large quantities of foreign steel were drawn from this port by the Punjab and the United Provinces for constructional work generally. Big orders placed by the Indian Stores Department with local and up-country firms also materially helped the trade during the year.

Imports from the United Kingdom advanced slightly by 649 tons to 41,054 tons, representing a share of 32 per cent. in the total arrivals as against 33 per cent. last year. The general improvement was most noticeable in purchases of steel angle and tee, sheets and plates, not galvanized or tinned and bars, other than cast steel. Supplies of plain galvanized sheets, wrought tubes, pipes and fittings and rails, chairs and fishplates and tinplates, on the other hand, were greatly curtailed. Belgium's share in the supplies of iron and steel was again the largest, but it was reduced by 10,162 tons from 54 to 44 per cent. Heavy bookings of orders from China, Japan, Africa and other foreign countries, coupled with a good demand from the United Kingdom and other places for semi-finished products, prevented that country from executing orders promptly, and hence the decline. As a result of the above conditions, local dealers turned their attention to France, a fact which accounts for the rise in her supplies from 5,298 tons in 1927-28 to 12,312 tons in 1928-29. The United States of America and Germany also sent more during the year. Of the total quantity of iron and steel imported, *viz.*, 127,375 tons, 88,275 tons paid the protective duties.

Following a decrease in the two previous years, imports of copper registered a substantial increase amounting to 8,165 cwt. or 67 per cent. in quantity and Rs. 4·54 lakhs or 72 per cent. in value, mainly in arrivals of sheets from Germany and France. The quantity imported was the highest in the quinquennium. Low stocks and high prices gave a fillip to the trade. The improvement of 4,656 cwt. in the quantity of brass was most

noticeable under mixed or yellow metal for sheathing from the United Kingdom and Germany.

Oils.—The total value of imports of oils amounted to Rs. 151·97 lakhs, showing an excess of Rs. 13·28 lakhs over the value recorded last year. The bulk of the imports, as usual, comprised mineral oils, and the total quantity imported during the year, *viz.*, 33 million gallons, was a record for the port.

The aggregate quantity of both foreign and Indian kerosene oils, which amounted to 23¾ million gallons, did not show any marked variation, being only 1½ million gallons or 7 per cent. in excess of the quantity imported last year, but unlike last year, there was a great disproportion between the figures of the quantity imported from foreign countries and that imported from Burma. Imports of foreign oil advanced from 12 million gallons to no less than 22¼ million gallons, while those of Burma oil dropped from 10¼ million gallons to only 1½ million gallons. The shortage in Burma oil was made up by heavy imports from Persia, which sent 10¼ million gallons as against only a little over half a million gallons last year. The United States of America sent only 2¾ million gallons as against 8¾ million gallons in 1927-28, but the deficiency was made up by large imports of Russian oil, which rose from 2¼ million gallons last year to 9 million gallons during the year under report.

Imports of fuel oil, which, last year, created a record at 10½ million gallons, fell slightly by 1 million gallons during the year under report. The decrease was due to smaller receipts from Persia, which supplied 8½ million gallons as against 6¾ million gallons in 1927-28. Arrivals from British Borneo, on the other hand, increased by ¼ million gallons to 4 million gallons.

The quantity of lubricating oils, imported during the year, declined by 256,941 gallons to 765,667 gallons and the value by Rs. 3·22 lakhs to Rs. 16·64 lakhs. The United States of America was, as usual, the chief source of supply, and the decrease was due to the increased consumption of the Attock Oil Company's products in the areas served by that company, on account of their cheapness.

Piece-goods.—Imports of cotton piece-goods amounted to 371 million yards valued at Rs. 1,017·62 lakhs, an increase of 15 per cent. in both quantity and value as compared with the previous year. The yardage was the third highest on record, the previous higher imports being 384 million yards in 1912-13 and 414 million yards in 1913-14. The aggregate arrivals of cotton piece-goods, both foreign and Indian, *viz.*, 506 million

yards were also higher than those in 1927-28 by 11 million yards. All the sub-divisions of piece-goods, *viz.*, grey, white and coloured shared in the improvement.

Silk.—The aggregate value of imports of silk yarn and manufactures amounted to Rs. 9·18 lakhs, an excess of Rs. 3·24 lakhs, which was due chiefly to larger purchases of silk yarn, noils and warps from Italy and goods of silk mixed with other materials from Germany.

Sugar.—The most noticeable feature of the year in the sugar trade was the enormous world-production and the resultant low level of prices—the lowest witnessed in recent years. The local market showed markedly increased activity, and imports rose to the high level of 209,624 tons valued at Rs. 363·61 lakhs, an increase of 59,179 tons or 39 per cent. in quantity and of Rs. 67·97 lakhs or 23 per cent. in value, as compared with 1927-28. The quantity imported was the second highest on record, the record total being 230,807 tons in 1926-27. It is also interesting to note that this quantity was higher by about 6,675 tons than that imported at Bombay during the year under report. It must, however, be admitted that the business done was not all remunerative. Dealers were induced to place large orders in the hope of realizing good profits as the forward prices quoted by the exporters in Java were somewhat below the parity of the local market at the beginning of the year, but local prices gave way under the pressure of huge supplies, and heavy losses were incurred. Java again supplied most of the sugar to this port, the continental variety not being able to compete successfully with the Java product. The outturn of the 1928-29 crop in Java was much larger than in the previous season, the expansion being attributed to the introduction of improved varieties of cane and scientific methods of cultivation. The small quantity, *viz.*, 1,349 tons of beet sugar imported during the year came in the last month of the official year, and some 10,000 tons are expected to arrive in the beginning of the coming year. Lower prices however caused increased consumption, and a fall in the production of Indian sugar also stimulated imports. Russian competition with Indian traders in Persia continued to be keen, and in consequence, the demand for export to that country by land was considerably reduced. The stocks of sugar remaining on hand in Karachi at the close of the year were estimated at about 26,000 tons.

Tea.—Imports of Chinese green tea, which had assumed considerable proportions during the five years previous to 1926-27, when the yearly average was about 624,000 lbs.

dwindled to 56,069 lbs. in 1926-27 and 52,020 lbs. in 1927-28, and during the year under report fell to the negligible figure of 4,910 lbs. valued at Rs. 5,814.

The total quantity of black tea imported during the year advanced by 100,565 lbs. to 351,809 lbs. and its value by Rs. 88,550 to Rs. 3·31 lakhs. Ceylon was, as usual, the chief source of supply, the total quantity received therefrom amounting to 289,837 lbs. as against 227,280 lbs. in 1927-28. The bulk of this import was dust tea, which is mostly consumed in Indian tea shops. China and Java also increased their supplies from 22,742 lbs. and 374 lbs. to 49,529 lbs. and 11,750 lbs., respectively.

Vehicles (excluding locomotives, etc., for Railways).—The trade in motor cars continued its upward course, and imports this year created a fresh record for the port. In all 2,178 motor cars of the total value of Rs. 49·69 lakhs were received, showing an excess of 199 cars and Rs. 5·77 lakhs over imports in the previous year.

The increase was practically confined to purchases from the United States of America and Canada, the usual largest suppliers. The British and Italian models, on the other hand, suffered a set-back. Following a record importation in the previous year, the number of motor omnibuses, motor vans and motor lorries declined slightly by 38 to 2,015, but their value rose from Rs. 33·30 lakhs to Rs. 37·72 lakhs, the disparity being due to imports of heavier lorries during the year. The decrease in the number occurred in receipts of chassis only, the figures for the past two years being 1,850 and 1,754, respectively. The number of complete wagons, imported with bodies, on the other hand, rose from 203 to 261 or by 29 per cent. and their value from Rs. 5·64 lakhs to Rs. 10·30 lakhs or by 83 per cent. Of the total number of commercial vehicles received during the year, *viz.*, 2,015, 1,410 were Canadian and 494 American, while the rest came from the United Kingdom, Italy and Germany. There was again an extraordinary boom in the cycle trade. No less than 28,840 cycles of the total value of Rs. 13·02 lakhs arrived during the year, the figures showing an excess of 6,247 machines and Rs. 3·13 lakhs over imports in 1927-28, which was a record year. Nearly 98 per cent. of these were English machines, mostly of a cheap type. The total value of imports of "carriages and parts for railways," almost wholly from the United Kingdom, advanced by Rs. 6·05 lakhs to Rs. 14·74 lakhs. The increase was due to heavy orders placed by the North-Western Railway with private firms.

Woollen goods.—Imports of woollen manufactures, including yarn and knitting wool, created a record for the second year in succession, the total value, *viz.*, 128·02 lakhs surpassing last year's figure by Rs. 6·79 lakhs or 6 per cent. The expansion was particularly striking in receipts of blankets and shawls. Imports of yarn and knitting wool, mainly intended for the Amritsar market, receded slightly by 36,403 lbs. to 433,663 lbs. in quantity and by Rs. 1·60 lakhs to Rs. 12·38 lakhs in value. The decrease followed a heavy increase in the previous year, and occurred chiefly in purchases from France and Poland. The United Kingdom and Germany, the two largest suppliers, on the other hand, sent more, *viz.*, 205,198 lbs. and 155,659 lbs. as against 183,634 lbs. and 143,621 lbs., respectively. Arrivals of piece-goods contracted by 286,971 yards to 5,529,004 yards in volume, but their value increased by Rs. 1·71 lakhs to Rs. 81·40 lakhs. France, as usual, sent the most and also increased her sales by Rs. 3·28 lakhs to Rs. 44·72 lakhs. The bulk of her exports comprised shawl cloth, consumed in the Amritsar market. Her supplies of cheap coatings are also increasing year by year at the expense of Bradford. Despatches of piece-goods from the United Kingdom receded in value from Rs. 19·46 lakhs to Rs. 15·02 lakhs, but those from Germany advanced by Rs. 1·77 lakhs to Rs. 10·76 lakhs. The total value of blankets, including carpets and rugs, rose from Rs. 18·18 lakhs to Rs. 21·52 lakhs, the bulk of the imports comprising cheap wrap and bed rugs from Italy. This country has secured a firm hold on the market in this particular line, and defies all competition. Imports of shawls were valued at Rs. 6·75 lakhs as against Rs. 4·25 lakhs in 1927-28, Germany being, as usual, the chief source of supply.

EXPORTS

Grain, Pulse and Flour.—The aggregate shipments under this head declined by 122,255 tons or 25 per cent. to 359,660 tons in quantity and by Rs. 198·21 lakhs or 27 per cent. to Rs. 528·75 lakhs in value, the decrease having occurred chiefly in exports of wheat.

Wheat.—As an inevitable result of the markedly adverse climatic conditions and the resultant poorness of the crop shipments of wheat dwindled by 187,950 tons or 63 per cent. to 109,529 tons in quantity and by Rs. 275·30 lakhs or 63 per cent. to Rs. 159·32 lakhs in value during the year under report. Ninety-seven per cent. of this quantity was exported during the first five months of the year. The 1928 outturn of the Indian wheat crop, *viz.*, 7,762,000 tons was the lowest since 1921,

and was insufficient to meet India's own requirements. It fell short of that of 1927 by no less than 1,211,000 tons, and was far below the average yield for the five years ended 1926, which was nearly 9½ million tons. This comparative failure, coupled with the increased consumption noticeable in recent years, resulted in the importation of no less than 562,000 tons to relieve the situation. The share of Karachi in this import was 105,507 tons, which was equal to 96 per cent. of the quantity exported to foreign countries during the year under report. The world production of wheat in 1928 was, on the other hand, almost a record since the war. Canada, the Argentine, Australia, and the United States of America, the four major exporters, had an exceptionally good harvest, and world prices ruled low in consequence. Indian prices, however, kept above the world parity for most of the year during which the local market witnessed many erratic fluctuations. Shipments to the United Kingdom, our chief customer, declined by 176,210 tons to 74,843 tons, while Belgium and France also reduced their purchases from 19,675 tons and 20,499 tons to 9,280 tons and 2,600 tons, respectively. Egypt, on the other hand, took more, *viz.*, 9,205 tons as against 192 tons last year. The total shipments of wheat from India amounted to 114,707 tons to which Karachi contributed 95 per cent. as against 99 per cent. in the previous year.

Other Food Grains.—The most noticeable feature of the export business in other food-grains was a considerable further advance in shipments of barley, the article next in importance to wheat, the quantity exported, *viz.*, 127,913 tons showing an excess of 59,011 tons or 85 per cent., and its value, *viz.*, Rs. 152·95 lakhs an excess of Rs. 70·97 lakhs or 87 per cent. over the figures recorded in the previous year. The expansion was most noticeable in despatches to Germany, which took no less than 77,865 tons as against 24,523 tons last year. The United Kingdom, on the other hand, reduced its purchases from 31,577 tons to 25,167 tons. Nearly 99 per cent. of the shipments took place in the first five months of the year, a fair proportion of them being from the 1927 crop. The increase was due to a good crop and high prices paid by Germany during the winter of 1927-28 owing to the failure of European crops. The demand continued until the European crop of 1928 was in sight. As usual, Karachi was the chief exporter of barley also, shipments during the year representing 93 per cent. of the entire quantity (137,847 tons) exported from India. Shipments of gram suffered a set-back, the total figures recorded, *viz.*, 7,631 tons

valued at Rs. 11·96 lakhs being less by 3,074 tons in quantity and by Rs. 3·73 lakhs in value than those in the preceding year. The decrease was due to a reduced demand from Egypt and France. The share of Karachi in the All-India shipments of gram, *viz.* (13,969 tons) was 55 per cent., the balance having gone chiefly through Bombay and Burma. Exports of rice rose by 3,049 tons to 50,345 tons in quantity and by Rs. 4·67 lakhs to Rs. 99·45 lakhs in value. The expansion occurred mainly in shipments of boiled rice to the Bahrein Islands, Aden and Dependencies, Other Native States in Arabia and Italian East Africa. Muscat Territory and Persia, on the other hand, bought less. The increase in the outturn of the crop in Sind from 390,000 tons in 1927-28 to 502,000 tons in 1928-29 stimulated exports.

Raw Cotton.—A considerable expansion in this valuable commodity was the chief redeeming feature of the export trade of the port during the year under review. The aggregate shipments amounting to 148,600 tons valued at Rs. 1,426·40 lakhs were higher than those in the previous year by 17,042 tons or 13 per cent. in quantity and by Rs. 163·72 lakhs or 13 per cent. in value, the quantity being the second highest on record, the record total being 179,679 tons in 1925-26. A bigger crop in Sind, Punjab and the United Provinces, coupled with some improvement in the parities between Indian and American cotton, gave an impetus to the trade. Local prices also ruled lower than in the previous year in sympathy with the world market. Germany was the largest purchaser, displacing Japan, and the total quantity taken by her, *viz.*, 30,772 tons showed an increase of 6,370 tons as compared with the previous year. Shipments to the United Kingdom also rose by 8,997 tons to 20,820 tons. Exports to China, which last year fell to the low figure of 2,007 tons owing to the chaos in that country, showed a marked recovery at 9,116 tons. Japan which, last year, curtailed its requirements to 32,698 tons from 54,805 tons in 1926-27 reduced them further to 29,439 tons in 1928-29. Large stocks of low grade American cotton in hand, coupled with the general trade depression caused by the after-effects of last year's financial crisis, precluded the possibility of business being done on a larger scale, and the position was further aggravated by the anti-Japanese movement in China. Italy took 2,254 tons less than in the previous year, the decrease being ascribed to the unsatisfactory state of the spinning industry in that country. It must be recorded that although the volume of business done during the year was on an increased scale,

large stocks remained in hand at the close of the year. The local dealers again held one cotton crop until another was in sight in the hope of realising better prices, but this speculative policy was once more fraught with disaster. Not only were heavy losses incurred owing to a fall in prices, but the accumulation of huge stocks in the Thole Produce Yard undoubtedly helped to increase the extent of the great fire there in April last year,—easily the biggest conflagration that has ever occurred in Karachi—and claims paid by Insurance Companies in respect of it amounted to the gigantic sum of nearly Rs. 45 lakhs. As a result of this and other numerous subsequent fires, not only have insurance rates been substantially increased, but some companies have declined further business. This trend of affairs should make it more difficult in future to finance the undue holding up of enormous stocks of cotton, which also has the undesirable effect of immobilising funds on a large scale.

Raw Wool.—The steady expansion in exports of raw wool, which has been such a noticeable feature of the past two years, continued during the year under report, and the total shipments increased further by 6 per cent. to 31¾ million lbs. in quantity and by 7 per cent. to Rs. 278·83 lakhs in value. The expansion during the year occurred chiefly in shipments to the United States and Belgium, the former raising its purchases by 1¼ million lbs. to 4½ million lbs. in quantity and by Rs. 10·30 lakhs to Rs. 38·57 lakhs in value and the latter by over ¾ million lbs. to 1¼ million lbs. and by Rs. 8·17 lakhs to Rs. 11·75 lakhs. Increased efforts to influence direct trade with the United States resulted in larger quantities being sent on consignment to that country by Indian dealers. Shipments to the United Kingdom, the chief purchaser, receded by a little over half a million lbs. to 25½ million lbs. and by Rs. 2·61 lakhs to Rs. 225·61 lakhs, but this decrease was set off by an increase of half a million lbs. and Rs. 8 lakhs in purchases of Kandahar wool.

Seeds.—The total quantity of seeds exported during the year decreased by 4,724 tons or 6 per cent. to 75,474 tons, but the value rose by Rs. 1·71 lakhs or 1 per cent. as compared with the previous year. The United Kingdom was the largest purchaser, and the quantity taken by her, *viz.*, 25,662 tons was 123 per cent. in excess of that in 1927-28. The improvement was due to a strong demand for oilcake and meal, on both home and export account. Italy, last year's chief purchaser, on the other hand, took much less, *viz.*, 9,273 tons as against 19,372 tons. As usual, Karachi was the largest exporter of rapeseed,

her share representing 88 per cent. of the total quantity, *viz.*, 77,496 tons shipped from India.

As regards the trade in other seeds, the United Kingdom greatly curtailed its orders for cotton seed, the principal item, and in consequence shipments of that commodity, which last year stood at 18,927 tons valued at Rs. 19·21 lakhs, fell to 4,187 tons valued at Rs. 3·88 lakhs.

Hides and Skins, raw.—The total shipments increased by 1,932 tons to 13,399 tons in quantity and by Rs. 28 lakhs to Rs. 175·72 lakhs in value.

Despite a heavy increase of 123 per cent. in quantity and 180 per cent. in value in shipments last year, raw hides continued to be in good demand in the earlier months of the year owing to a shortage in various quarters, and high prices were again paid. Exports during the year aggregated 6,791 tons valued at Rs. 88·78 lakhs, showing an excess of 4 per cent. in quantity and 10 per cent. in value over the figures recorded in 1927-28. The improvement was most noticeable in purchases of cow hides by Spain, Italy and Belgium and buffalo hides by the United States and Bulgaria. Shipments to the United Kingdom and Germany, mostly consisting of cow hides, on the other hand, decreased by 413 tons and 424 tons, respectively. The demand for raw hides, both at home and on the Continent, slowed down considerably towards the end of the year resulting in a slump in values.

After a set-back in the two previous years, exports of raw skins at 6,126 tons valued at Rs. 85·92 lakhs showed a substantial improvement of 34 per cent. in quantity and 29 per cent. in value as compared with 1927-28, the quantity reaching a level which was the third highest on record, the two previous higher shipments being 9,650 tons in 1916-17 and 8,360 tons in 1919-20. Shipments during the year, as usual, largely consisted of goat skins, the quantity rising from 4,321 to 5,537 tons and the value from Rs. 61·53 lakhs to Rs. 78·40 lakhs. The United States, the chief purchaser, took nearly 91 per cent. of this quantity.

Articles wholly or mainly manufactured.—The total value of the articles included under this class advanced further by Rs. 4·04 lakhs to Rs. 35·40 lakhs. The improvement occurred mainly in exports of leather, the value of which rose from Rs. 10·78 lakhs to Rs. 13·78 lakhs as a result of the United Kingdom taking more cow hides, dressed.

Foreign Merchandise, Re-exported.—The total value of re-exports of foreign merchandise amounted to Rs. 177·73 lakhs, showing an increase of Rs. 38·25 lakhs or 27 per cent.

as compared with the previous year. Shipments of raw wool, mostly Kandahar wool, the most important article in this entrepot trade, advanced by nearly a million lbs. to 8 million lbs. in quantity and by Rs. 13·21 lakhs to Rs. 71·74 lakhs in value, owing to a better demand from the United Kingdom and the United States. The value of re-exports of woollen manufactures, mainly Persian carpets, also rose from Rs. 37·10 lakhs to Rs. 49·96 lakhs chiefly in despatches to the United Kingdom and the United States, the two largest customers. Sugar, which came next, was also exported in larger quantities, the figures for the past two years being 4,340 tons valued at Rs. 11·08 lakhs and 6,174 tons valued at Rs. 12·28 lakhs, respectively. The increase occurred in shipments to the Bahrein Islands and Ceylon.

COASTING TRADE

The aggregate value of the coasting trade of the chief port, amounted to Rs. 1,428 lakhs, showing a decrease of Rs. 280 lakhs or 16 per cent., as compared with the previous year. Both imports and exports suffered a set-back, the value of the former having fallen by Rs. 128 lakhs to Rs. 982 lakhs, and that of the latter by Rs. 152 lakhs to Rs. 446 lakhs.

SUBORDINATE PORTS

Keti Bandar and Sirganda.—The total value of the entire trade with these two ports, which is confined to trade with coast ports, rose from Rs. 8·26 lakhs to Rs. 10·68 lakhs to which Keti Bandar contributed 73 per cent. and Sirganda 27 per cent. Rice is the chief produce of both these ports. During the year under report Keti Bandar exported 1,463 tons to Karachi, 1,171 tons to Cutch, 488 tons to Madras and 2 tons to Kathiawar, while Sirganda sent 2,045 tons to Cutch.

SHIPPING

Foreign Trade.—The total number of vessels engaged in the foreign trade increased slightly from 1,193 to 1,195, and their tonnage from 2,024,908 to 2,101,428 tons. The improvement occurred under steam vessels only, their number rising from 675 to 687. The average tonnage per steamer also rose from 2,927 tons to 2,993 tons. The number of sailing vessels, on the other hand, declined from 518 to 508. In all 938 steamers entered the port as against 915 in 1927-28. The number of vessels flying the British flag rose by 8 to 739 and those of foreign nationality by 15 to 199, the increased tonnage being required to deal with larger exports of cotton, wool, barley and raw hides and skins and partly to bring wheat from Australia. In all

17 steamers arrived with wheat, 16 from Australia and 1 from Natal. As regards arrivals of foreign steamers, a noteworthy feature was the increase in the number of Norwegian steamers from 11 to 23.

Coasting Trade.—The total number of steam and sailing vessels employed in the coasting trade increased from 5,528 to 5,744 and their tonnage from 3,026,234 to 3,185,537.

Freight.—Freight rates to the United Kingdom which, at the beginning of the year stood at 20*s.* 6*d.* for wheat and 19*s.* 6*d.* for rapeseed, declined to 16*s.* and 15*s.* at the beginning of September, the lowest figures of the year. An advance, however, soon followed, and the highest figures of the year, *viz.*, 24*s.* for wheat and 23*s.* for rapeseed were registered in the first week of January. This level was, however, not long maintained, and the closing rates on 27th March were 19*s.* for wheat and 18*s.* for rapeseed.

ADEN

The trade of Aden is mainly transhipment, the port being a centre of distribution to and from neighbouring countries. The principal business is in coffee, hides, skins and cotton piece-goods.

The total value of the private sea-borne and land trade of Aden for the year 1928-29 decreased from Rs. 17 crores 81½ lakhs to Rs. 15 crores 67½ lakhs. The sea-borne trade alone showed a decrease of Rs. 2 crores 8 lakhs. The total value of the import trade, exclusive of treasure, decreased from Rs. 8 crores 11¾ lakhs to Rs. 7 crores 64¾ lakhs. The value of articles of food, drink and tobacco increased by Rs. 8⅓ lakhs to Rs. 2 crores 55¾ lakhs. Grain and pulse, wet dates, provision ghee, spices, sugar refined and tobacco were chiefly responsible for the increase, while decreases were noted in coffee and tea.

The value of raw materials and produce and articles mainly unmanufactured increased by nearly Rs. 2 lakhs to Rs. 2 crores 41¾ lakhs. Increases in value were noticed in gums and resins by Rs. 5 lakhs, raw hides by Rs. 2½ lakhs, raw skins by Rs. 6½ lakhs and seeds by about Rs. 2 lakhs. The chief decreases were in oils (Rs. 9 lakhs) mainly due to fuel oil, kerosene oil (Rs. 2¾ lakhs) and wood and timber (Rs. 2½ lakhs). Coal decreased by Rs. 4½ lakhs in value but increased by 2,300 tons in quantity. The value of articles wholly or mainly manufactured decreased by nearly Rs. 55 lakhs to Rs. 2 crores 57¾ lakhs. Hardware, dyes and tanning substances, glassware, metals, cotton goods, piecegoods-grey, white and dyed, silk and soap showed a decrease.

The increases were chiefly in apparel, chemicals, machinery and millwork, cotton twist and yarns and jute.

The value of the export sea-borne trade, exclusive of treasure, amounted to Rs. 6 crores 18¾ lakhs as against Rs. 6 crores 37¾ lakhs in the previous year, showing a decrease of Rs. 19 lakhs, coffee, black tea and sugar being chiefly responsible for the decrease in articles of food and drink; while the chief increases were in grain and pulse, rice, jowar, fruit and vegetable, ghee, spices, salt and tobacco unmanufactured. Raw materials and produce increased in value by Rs. 23 lakhs to Rs. 1 crore 63 lakhs, chiefly in gums, raw hides and skins, goat and sheep skins, seeds and specimens of natural science; while articles wholly and mainly manufactured decreased by Rs. 37½ lakhs to Rs. 2 crores 7½ lakhs, chiefly in hardware and cutlery, metals, cotton manufactured and piecegoods.

The total imports of treasure decreased by Rs. 66½ lakhs and exports by Rs. 76 lakhs.

The total sea-borne trade, excluding treasure, amounted to Rs. 13 crores 83½ lakhs. The British Empire exhibited the highest total, the value being Rs. 5 crores 97½ lakhs with a percentage of 43·19, of which India's share was Rs. 2 crores 31½ lakhs.

The number of vessels entering the port was 1,635 with a tonnage of 5,788,548 against 1,575 with a tonnage of 5,707,205, the year previous.

Land Trade.—In addition to the Camel Caravan Trade with the mainland of Arabia, the Aden Railway transports goods between Aden and Lahej. The total value of the produce decreased by Rs. 1 lakh to Rs. 32¾ lakhs, chiefly in sheep and goats, coffee, grass and kerbi, raw hides and skins, and grain. Exports decreased in value by Rs. 4¾ lakhs to Rs. 25½ lakhs, due chiefly to cotton twist and yarn, piecegoods, metals, oil kerosene and sugar.

SHIPPING OFFICES

In addition to the shipping, paying off and discharging of ships' crews, the Shipping Office has a variety of miscellaneous duties to perform. These include the settlement of disputes between ship-masters and seamen, the administration of the estates of deceased seamen of the Mercantile Marine, the disposal of distressed British and Indian seamen and the inspection of rations and water provided for the crews. The settlement of claims of seamen or their dependants in case of accident or death and the receipt and disposal of dead seamen's

effects and the registration of seamen also come within the scope of the Shipping Master.

During the year under report the Bombay Shipping Office signed on 35,833 seamen of many nationalities and discharged 37,752. About 11,630 Goanese were signed and 11,650 were discharged, almost all in the Stewards Department. 21,127 other Indians were signed and 22,919 discharged. Deck hands were both Hindus and Muhammadans, but those in the engine room were exclusively Muhammadans. The total expenditure was Rs. 89,500.

The Karachi Shipping Office shipped 354 seamen and discharged 534. The amount of shipping fees realised decreased from Rs. 1,088 to Rs. 999. The expenditure was Rs. 1,440.

The Aden Shipping Office engaged and discharged 1,240 seamen and 60 distressed seamen were repatriated. The shipping fees received and credited to Government amounted to Rs. 3,084 against Rs. 4,950 in the preceding year.

CHAPTER VII

PUBLIC WORKS DEPARTMENT

THE Public Works Department has long been an important feature of the British administration in India. Its history dates from 1854 when it first came to be organised on a definite basis in succession to the old military boards, constituted mainly for the carrying out of military works.

For administrative purposes the work of the Department is divided into two sections: (i) Roads and Buildings and (ii) Irrigation.

During the year under review the Roads and Buildings Branch of the Public Works Department of the Presidency executed works involving a total expenditure of over Rs. 190 lakhs. The expenditure on buildings connected with Central Services amounted to Rs. 14¼ lakhs and included Customs Rs. 5½ lakhs, Post Offices and Telegraphs Rs. 4½ lakhs, Salt and Political Rs. 2 lakhs and Military and Archæological over half a lakh each.

On the Provincial side the works under General Administration, *i.e.*, Residences for Heads of Provinces, Provincial Legislative Councils, Secretariat and Headquarters Establishment and Commissioners and District Officers, etc., amounted to about Rs. 15½ lakhs. The new Council Hall, and the conversion of the Sailors' Home, Bombay, into offices for the Legislative Council were completed during the year, while the works of constructing break-waters and stone-pitched berms along the Eastern foreshore of the Government House grounds, Malabar Point, Bombay, and a new Mamlatdar's Kacheri at Amalner were in progress.

Under Administration of Justice, the works cost about Rs. 7½ lakhs, and under Jail and Convict Settlements Rs. 6½ lakhs. The principal works completed during the year were the District and Sessions Court, Small Causes Court and First and Second Class Subordinate Courts, Poona, several works in connection with the Nasik Road Central Prison, Quarters for the Jailor at the Central Prison (Hindalgi), Belgaum, and the extension of the District Prison at Karachi.

The expenditure under the head "Police" was Rs. 5¼ lakhs. The police accommodation scheme at Naigaum, Bombay, and the Railway police lines at Gadag were completed.

Over Rs. 4½ lakhs were spent on " Education " on works and repairs to colleges, secondary and primary schools. The Ismail College at Andheri was completed.

The works under " Medical " cost over Rs. 15½ lakhs. The Byramji Jeejeebhoy Hospital for Children and the Ellappa Balaram Ward Pavilion at Sir J. J. Hospital, Bombay, and additions and alterations to the Lady Dufferin Hospital at Shikarpur were completed during the year.

Civil works cost over Rs. 3½ lakhs.

Central Workshops, Dapuri.—The financial position of the Workshops noticeably improved, the loss being Rs. 39,476 against Rs. 58,502 in the previous year. The total turn over was Rs. 20,964 more than in the previous year. During the year 29 apprentices were under training, five completed their apprenticeship and 11 new apprentices were engaged. Some of the boys have been specially trained for steam road-roller repair work.

ARCHITECTURAL

Designs and sketch plans were made for several buildings in connection with the Preventive Officers' Club Home, Matunga, Central Offices at Ahmedabad, District and Subordinate Courts, Dharwar, and the Agricultural College, Poona.

In regard to public and institutional buildings designs were prepared for a number of works in connection with the J. J. Hospital Reconstruction scheme, the Post Office at Matunga, Bombay, a New Post Office building at Ahmedabad, the Post and Telegraph Office, Belgaum, certain works in connection with the Cama and Albless Hospital, Bombay, extension of the Civil Hospital, Karachi, the Civil Hospital, Nawabshah, and the Central Hospital, Shikarpur. Type designs were prepared for quarters for Provincial Service and Junior Imperial Service officers in Sind.

ELECTRICAL

Electricity has continued to attract the attention of the public in an increasing degree. This great public amenity has come to be looked upon as a necessity and not as a luxury and its provision in the Bombay Presidency is already on a far larger scale than in any other Province in India. Five new licenses were granted in the year under report for the supply of electricity to Jalgaon, Dhulia, Kalyan, Lonavla-Khandala and Nadiad. Several more applications were under the consideration of Government. The number of licenses in operation at the beginning of the year under report was 27 while at the end of the year the number operating or under consideration was 41.

An expenditure of over Rs. 6¼ lakhs was incurred on works of electric installations.

COMMUNICATIONS

Expenditure under this head amounted to about Rs. 52½ lakhs of which Rs. 35¾ lakhs were spent on repairs to roads and bridges and Rs. 16¾ lakhs on new works.

ARBORICULTURE

Nurseries were maintained at various places and the planting, watering and protection of roadside trees continued to receive careful attention. About 27,302 trees were planted during the year along Provincial and Local Fund roads in charge of the Department.

MISCELLANEOUS

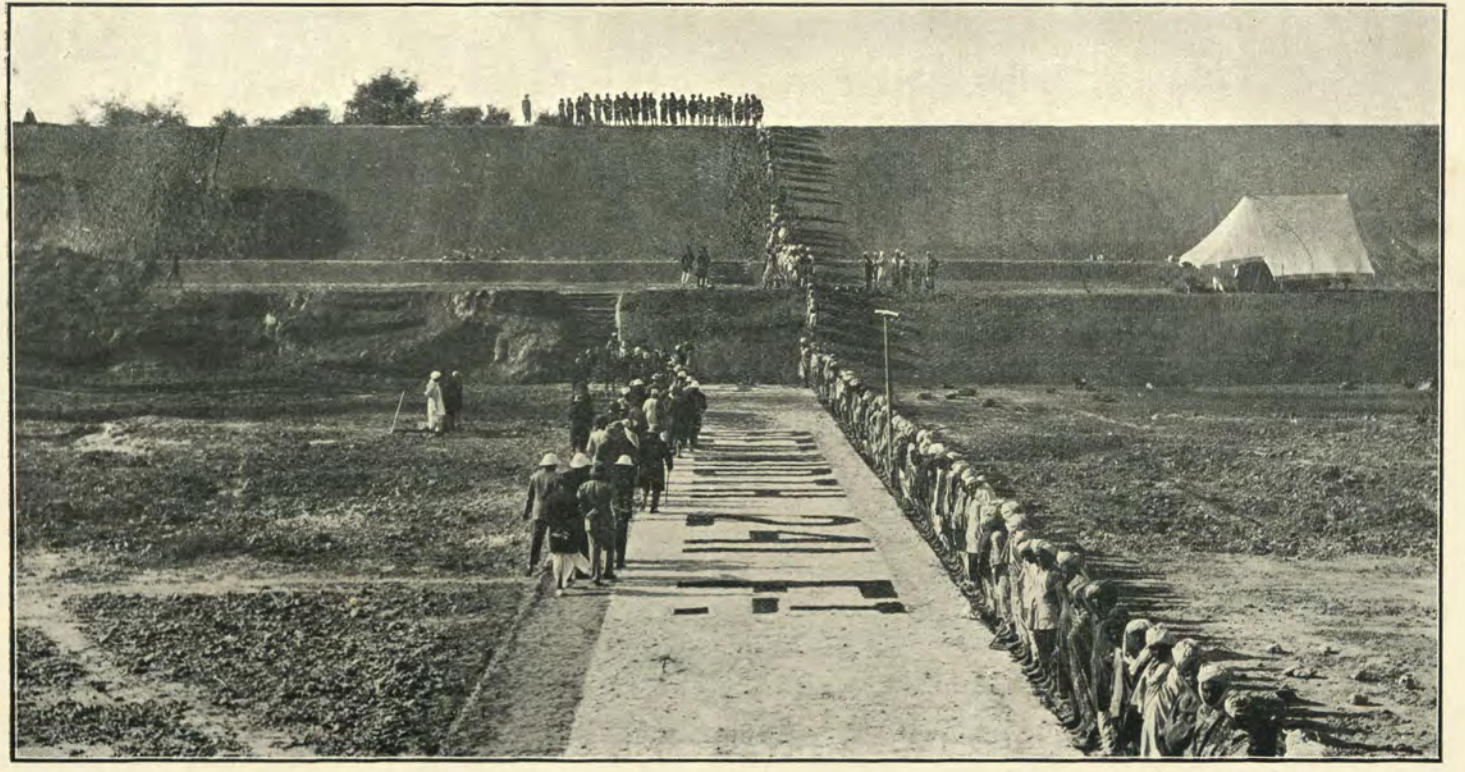
Over Rs. 9 lakhs were spent on public health, various water-supply and drainage schemes and boring works. The water-supply scheme at Nasik Road Central Prison was in progress and those at the Dharwar Headquarters Police Lines and at Uran were nearly completed. Improvements to water-supply at Pandharpur, Barsi, Nipani, Jalgaon, Jacobabad, Dholka and Kapadwanj and to the drainage works at Tando Adam, Kapadwanj, Dhulia, Sholapur, Gadag-Bettigeri were carried out. About 51 schemes for water-supply and drainage were also investigated during the year.

IRRIGATION

GENERAL

The Irrigation works in charge of the Public Works Department are divided into two distinct spheres, *viz.*, (1) Sind and (2) Deccan and Gujarat.

The Province of Sind is situated beyond the influence of the south-west and the north-east monsoons, and in consequence its rainfall is normally small and unreliable. Unlike the greater part of India, therefore, the area of cultivation in Sind that depends upon rainfall is insignificant. The river Indus, however, brings down abundant supplies of water, the discharge rarely falling below 22,000 cusecs, while the average is as high as 110,000 cusecs. From where it enters the Province of Sind, the river is generally in deltaic formation, flowing along an elevated ridge formed by its own alluvial deposits. The indigenous system of irrigation by inundation canals takes advantage of this physical peculiarity. The device is primitive ; a cut is taken out from the river and, after a short distance, the canal turns to a course parallel to the river commanding the low-lying lands falling away from the marginal ridge.



Lloyd Barrage and Canals Construction—Inspection of canal excavation by M.L.Cs., showing dressed and undressed earthwork. [*Facing page 160*

These old irrigation works have been improved and extended. Scientific methods have been introduced into the design and control of the canals, and many of them have been provided with head regulators. But there are inherent defects in this method of irrigation. The cultivation at present dependent on river inundations is principally kharif, and even this is subject to insecurity of supply due to fluctuation in the river water levels ; the low water supplies in the winter season can be tapped only to a small extent and largely run to waste to the sea. When the Lloyd Barrage and canals scheme, now under construction, comes into operation perennial irrigation will displace the present precarious inundation supply throughout the large portion of Sind which will be commanded by this scheme.

In the Deccan and Gujarat rainfall is ordinarily available for agricultural operations but it is often precarious in quantity and its incidence cannot be relied on. Tanks and canals provide irrigation to valuable crops, such as sugarcane, and they also afford supply to other crops when the rainfall is deficient or irregular.

The irrigation works in the Bombay Deccan are fundamentally different from those in Sind, the Punjab, Egypt, or Mesopotamia, where wide alluvial plains have been formed by very large deltaic rivers in perennial flow. The Bombay Deccan consists of a sloping tableland running eastward from the ridge of the principal geographical feature of Western India, the Western Ghats, running parallel to the sea-coast at a distance from it of 50 to 100 miles ; precipitous on the western side they fall away gradually to the east. The heaviest rainfall occurs on the peak of the ghat ridge, where anything up to 250 inches or more of rainfall is recorded in the four monsoon months. The intensity of the rainfall decreases very rapidly however eastward from the main ridge, diminishing to a figure of 20 or 25 inches at a distance of 100 or 150 miles east of the ghats. The rivers in the Bombay Deccan have their source in the valleys and slopes of the ghats, flow in an eastward direction, and are dry, or practically so, for seven or eight months of the year. The watershed of the ghats divides the rainfall, the smaller portion falling westward into the Indian Ocean, and the remainder flowing through the long lengths of tortuous rivers to the east, eventually finding egress to the sea on the south-eastern coast of the peninsula. These rivers are in flow during the monsoon months only, and if no artificial means of conserving their waters were provided, the

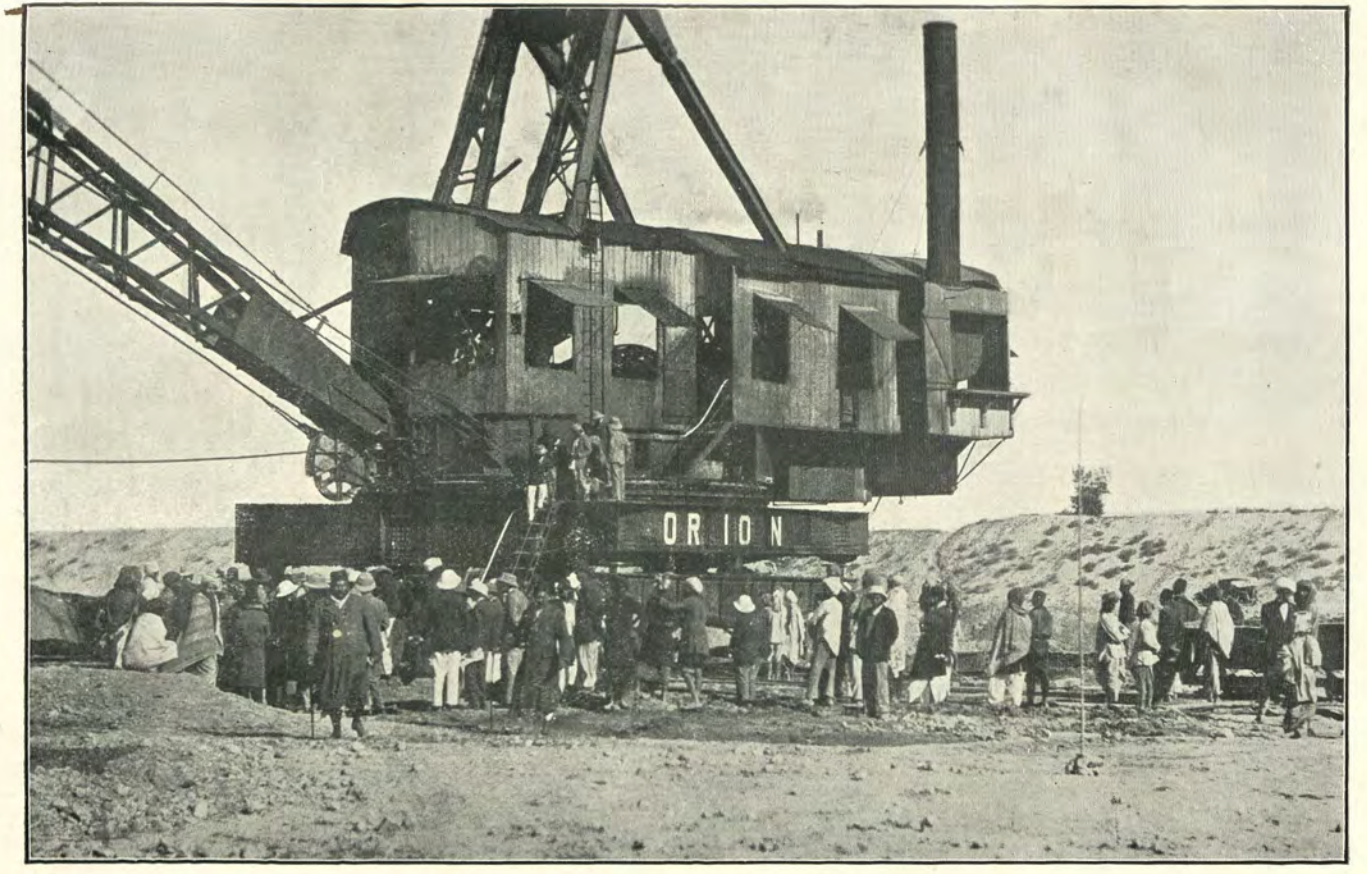
whole monsoon rainfall would be wasted so far as the Bombay Deccan is concerned.

The large irrigation systems in the Deccan are all of the same type. Each depends upon a storage lake near the head of one of the river valleys where sufficient water is collected during the monsoon to afford irrigation to the country on either side of the river-valley below. The water stored during the rains is released, as needed, during the dry months of the year and at a suitable point on the river, which may be as far as 50 miles from the main storage lake, a pick-up weir is constructed across the river-course to divert the water into canals which take off on either side above the weir. In one case only, Lake Fife at Khadakwasla near Poona, do the canals take off from the flanks of the dam itself. The canals are always constructed at a considerably flatter slope than that of the river, and consequently are able to diverge from the river itself on each side of the valley; as a rule each canal only irrigates the area between itself and the river. Of the new large irrigation works, the Pravara river works have been completed and its canals are in full operation. The Lloyd Dam at the head of the Nira Valley, feeding two large canals on either side of this valley, has now been completed in all respects. In Gujarat, projects for reservoirs on the Panam river at Dejar and on the Watrak river near Magodi and Mehmadabad and for a weir across the Meshwa at Raska are under preparation.

The expenditure on all irrigation works in the Presidency during 1928-29 amounted to Rs. 388 lakhs, of which Rs. 344 lakhs were spent in Sind and the balance in the Deccan and Gujarat.

The amount spent on works for which capital and revenue accounts are kept was 364 lakhs. The total receipts from these works amounted to Rs. 118 lakhs as compared with 104 lakhs in the previous year. The area irrigated was 3,798,000 acres, an increase of about 291,000 acres as compared with the average of the previous three years. This increase was entirely in Sind, where the irrigated area rose from 3,307,000 acres to 3,635,000 acres. In the Deccan and Gujarat the area irrigated showed a decrease of about 36,000 acres as compared with the average due to less demand for water owing to the good monsoon season.

For the remaining works for which no capital accounts are kept, the area under irrigation, *viz.*, 234,000 acres showed a decrease of 3,000 acres as compared with the average of the last three years. These works did not yield any revenue as



Lloyd Barrage and Canals Construction—Inspection of dragline excavators by M.L.Cs. near Bagarji. [*Facing page 162*

the expenditure thereon, *viz.*, Rs. 30 lakhs exceeded the receipts by about Rs. 12 lakhs.

SIND

The inundation of 1928 was a fairly good one. The river did not rise much above the fair irrigating level but it kept steady at a little below that level for a long period. The fair irrigating level of 13 feet on the Bukkur gauge was first reached on 28th July and was maintained for 11 days only. The fair irrigating level of 17 feet on Kotri gauge was first reached on the 15th June and was maintained for a period of 85 days. The rainfall during the season was very scanty and was not of material benefit to the crops.

INDUS RIGHT BANK CIRCLE

The Desert canal was opened on 27th May and ceased to flow on 12th October. The Unharwah canal system worked satisfactorily and flowed until the water fell to 1·00′ on the Bukkur gauge. The Begari canal was opened on 29th May. The gates with locking arrangements, which were provided on all the sluices in miles 31 to 76 of the canal, were operated during the inundation season with the result that the two tail branches, *viz.*, the Idan and Sirwah received an excellent rotation supply during the inundation season. The Mahiwah system worked efficiently. The supply in the Sind canal was good throughout the season except in the month of July when the river was low.

The crops on the Garang canal suffered to a great extent owing to low river but were largely matured by rotations. The Chitti canal worked much better this year than in the previous 3 or 4 years owing to improvements made in the section of the canal. There was a fairly good supply in the Rajib canal. The Garkino canal did not work well. The Ghar canal was opened on the 1st of June. It was fed from the Arab Dhoro. The system on the whole worked satisfactorily. The Fordwah worked satisfactorily throughout the whole abkalani.

The improvements carried out to the Sukkur canal system resulted in the entire system doing well except the upper portion. The Western Nara worked satisfactorily and all the crops along it were fully matured. The Pritchard canal worked well and materially assisted the lower Nara and its branches. There was a change in the river course at the head of the Pinyari canal which necessitated the excavation of a new head and this was constructed. The canal and its branches worked satisfactorily throughout the season.

The Baghar commenced flowing in the beginning of March. By the construction of a head regulator and bunds on both sides of the canal, the tract commanded by the canal has been much relieved from floods. The Kalri canal worked satisfactorily. A project for remodelling this canal is under consideration. The Sattah canal commenced to flow in the middle of May. The deficiency at the tail of the canal was met by rotations.

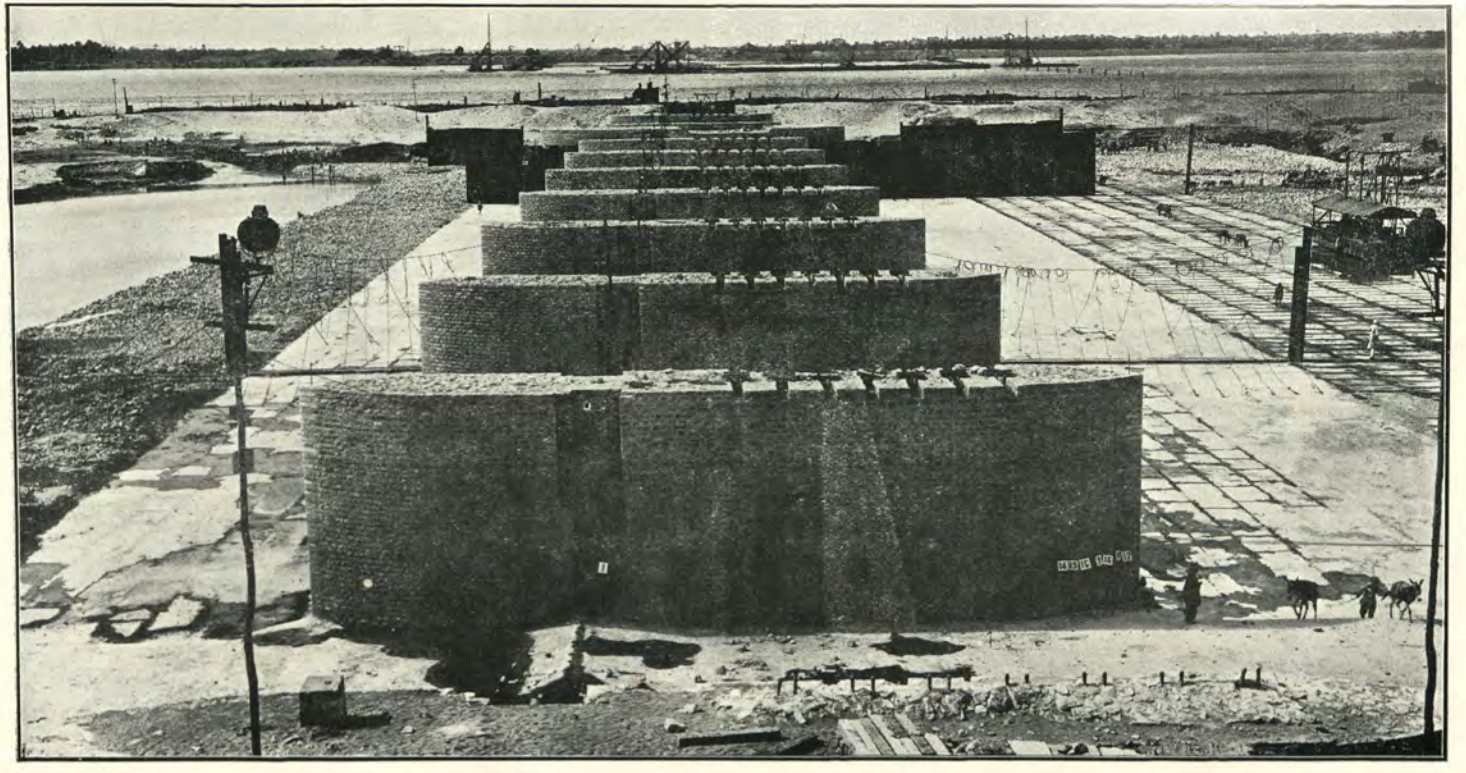
INDUS LEFT BANK CIRCLE

The canals in this circle fall into two groups, *viz.*, (1) the Eastern Nara system and (2) canals taking off direct from the Indus. The former includes the Nara river, the Jamrao, the Mithrao, Khipro, Thar and Hiral canals, all of which except the Khipro canal, which flows during the inundation only, are semi-perennial and are fed by the Nara Supply Channel. The total area cultivated on the Jamrao canal was about 212,500 acres. The Mithrao canal worked with rotations throughout the season. On the Thar and Hiral canals rotations were resorted to.

The second group includes the Nasrat, Dad, Fuleli, Hassanali and a large number of small canals which are classed as inundation canals. The Nasrat canal from the beginning of the abkalani fully met the requirements of all its reaches from head to tail. The Dad canal was opened in the beginning of June and ceased to flow in the middle of October. The Naulakhi canal worked satisfactorily. A new head to this canal was excavated during the year as the old head failed last year. The remodelled Mithnawah and Shadiwah Left distributaries of the Fuleli Canal worked satisfactorily. The area irrigated was about 450,000 acres. The Hassanali canal flowed with full supply level practically throughout the season. The area irrigated by the canal systems in the Hyderabad canals Division was about 268,700 acres.

INDUS RIVER COMMISSION

The Indus River Commission is entrusted with the entire management and control of the river Indus in the province of Sind. It carries out periodical surveys and constructs and maintains the river bunds which protect the country from inundation by high floods in the river. The total length of the river surveyed during the year was 589 miles. The Indus River Commission also arranges for the accurate gauging of the river and for velocity, silt and discharge observations. The results of these observations are published periodically.



Lloyd Barrage—Right Bank cofferdam.

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LLOYD BARRAGE AND CANALS CONSTRUCTION

The scheme consists of a barrage or weir across the Indus three miles below the gorge at Sukkur with three canals on the right and four on the left bank, taking off therefrom, each with a separate head-regulator. It is divided into 5 Circles of Superintendence with a Chief Engineer at the head. One Superintending Engineer is in charge of the construction of the Barrage with the river training works and the head works of the main canals while the remaining Superintending Engineers are in charge of the construction of the canal systems. As regards the construction of the Barrage the year was devoted to (1) the construction of the superstructure of the twelve spans of scouring sluices and four river spans of the Barrage which were completed up to the springing level of the road bridge arches, (2) the construction of road bridge arches and inner and outer gate bridge arches in connection with the head regulators over canals, (3) completion of service works, the collection of reserve stocks of various materials, such as lime, sand, stone, etc. The canal circles were occupied in surveys, preparation of designs of canals, acquisition of land, construction of buildings and excavation of canals, branches, distributaries and minors both by draglines and manual labour. Designs for all main canals and branches and most of the distributaries and minors have been completed. Excavation was carried out by manual labour and by 46 dragline excavators of various sizes and types, the largest group of excavators ever used on one work anywhere in the world. The total capacity of these excavators is roughly 74 tons of earthwork excavated and dumped per minute, or 1·23 tons per second, night and day for 5½ days in the week and 250 days in the year. This represents the labour of nearly 32,000 men working all the year round or of about 75,000 men working for 5 months of the year, the normal working season in Sind for this type of manual labour.

Lloyd Barrage Circle.—The work on the scouring sluice spans of the Barrage proper was completed according to the programme. On account of the abnormal level of the river in April 1928 a breach occurred in the Right Bank cofferdam. The repairing of this breach and the pumping out of the cofferdam delayed the work by about a month; but the season's work was successfully finished in spite of the difficulties encountered. The superstructure of the five spans of the scouring sluices and 1½ spans of the Barrage proper on the Right Bank was raised up to the springing level of the gate bridge piers. The main floor, aprons and concrete paving were completed for the

whole area. On the Left Bank the piers of the seven scouring sluices and 2½ spans of the Barrage proper were raised up to the springing level of the road bridge arches, while on the up-stream half of the piers (*i.e.*, the gate bridge portion of the piers) they have been brought up to R.L. 198.

On the Right Bank the cofferdam for the season's work was closed on 9th December, the raising of the sand slopes by dredger up to water level was completed, and the whole area was pumped dry to foundation level for excavation by hand. Two gate bridge arches of reinforced concrete were cast, and cut stone pilasters on the down stream side of six gate arches were raised from R.L. 219·0 to R.L. 226·6. The central floor and the down-stream apron of spans 6½ to 16½ were excavated to foundation level, and the masonry was started in almost the whole area. All the four rows of permanent piling were started, and about three-fourths of the total number of piles were driven. All piers of the five scouring sluices and one abutment pier were completed for the gate bridge portion, and eight arch centerings were placed in position. On the Left Bank, the cofferdam was finally closed on the 15th December. The raising of the sand slopes up to water level was completed, and the whole area was pumped dry to the foundation level.

On the Right Bank the superstructure masonry of the three head regulators was carried from R.L. 215 to R.L. 229 on the North-Western Perennial and Central Rice Canals. About four-fifths of the cut-stone work, except the parapet on the up-stream side of the three canals, was completed. All the road and gate bridge arches except five of the Central Rice Canal Head Regulator were completed. On the Left Bank the super-structure of the four regulators up to the springing level of the arches and the road bridge arches of the Khairpur Feeder West Head Regulator were completed. About five lakhs cubic feet of earth-work was excavated in order to lay the concrete paving and concrete blocks in the down-stream apron of the Rohri Canal Head Regulator. Ten road bridge arches of this regulator were completed.

The down-stream guide bank on the Right Bank was completed up to R.L. 214. The cement block protection on the side slope of the guide bank was completed as far as possible. The stone pitching on the side slope has been laid up to R.L. 190 from chainage 1,000 to 16,000 of the guide bank, and the apron filling is in progress. The downstream guide bank on the Left Bank was practically completed.

In the North Western Circle the total quantity of earth work done was 55·33 crores cubic feet for main canals, branches and distributaries and an approximate total amount of 48·00 crores cubic feet remains to be done to complete the work. Good progress was made with the construction of regulators and bridges.

In the Western Circle the total quantity of earth work done was 51·22 crores cubic feet. The amount remaining to be done is about 45·0 crores cubic feet. The earth work of the Dadu canal was practically completed. Good progress was made with the construction of intermediate and tail regulators, falls, fall regulators and steel and masonry bridges on the Dadu and Central Rice Canals and their branches.

The total quantity of earth work done in the **Rohri Canal Circle** was about 89 crores cubic feet. The amount remaining to be done is about 150 crores cubic feet.

In the Eastern Nara Circle the total quantity of earth work done was 52·0 crores cubic feet and an approximate total amount of 72·0 crores cubic feet remains to be done to complete the work. Good progress was made with the construction of the right containing and left protective banks, and also with the flood diversion banks along the Eastern Nara from Makhi Weir to Khipro Weir and from Khipro Weir to Thar Weir. Good progress was made with the construction of regulators and road bridges.

The total expenditure incurred on the project up to the end of March 1929 was approximately Rs. 9·78 crores.

DECCAN AND GUJARAT

NORTHERN CIRCLE

The Hathmati and the Khari Cut is the only important canal system in this Circle, the remaining works being small tanks dependent upon local rains. There was a fairly good monsoon during the year under review. The rainfall, though not above the average, was well distributed. The replenishment in the tanks and canals was satisfactory. A remarkable feature of the year was the very unusual hard frost in January 1929 which damaged the rabi crops seriously. The crops irrigated by canal water were saved to some extent but on the whole the outturn was below normal. The area irrigated by the Hathmati and Khari Cut system was 13,200 acres.

CENTRAL CIRCLE

The most important irrigation works in this Circle are the Ekruk tank, the Jamda and the Krishna Canals. The Ekruk

tank supplies water to the town of Sholapur, the Mills and the Great Indian Peninsula Railway and also for irrigation. Under unfavourable conditions of replenishment, the tank is not able to meet all the demands, agricultural and non-agricultural, made on it and investigations are in hand for providing an additional storage reservoir to supplement the supply. The sixteen first class irrigation works in this Circle irrigated an area of about 28,000 acres.

DECCAN IRRIGATION CIRCLE

The largest and the most important irrigation works in the Presidency proper are in the Deccan.

Mhasvad tank.—This irrigation tank is formed by an earthen dam across the Man river, 9,000 feet long and 80 feet high at its highest point and it has a storage capacity of 2,600 million cubic feet. It is situated on the eastern border of the Satara District but irrigates lands in the Sholapur District. The tank irrigated about 6,000 acres during the year.

Godavari Canals.—This was the first of the important irrigation works undertaken in the Central Deccan for the protection of areas liable to famine. It was completed in 1915-16 at a cost of a little over one crore of rupees. This system comprises (1) a storage reservoir, called Lake Beale, on the Darna river, (2) a pick-up weir at Nandur Madhmeshwar on the Godavari river, and (3) the Godavari Right and Left Bank Canals. The Right Bank Canal is 69 miles long and the Left Bank Canal is 48 miles long and they irrigate lands in the south of Nasik District and north of Ahmednagar District. The area of all crops irrigated by this system was about 25,000 acres. Survey for an additional storage for the Godavari Canals was in progress.

Mutha Canals.—This irrigation scheme consists of—

(1) a storage reservoir at Khadakwasla, known as Lake Fife, and

(2) the Mutha Right and Left Bank Canals.

The water of the lake is used partly for supplying drinking water to Poona and partly for irrigation. In consequence of the favourable monsoon the demand for monsoon water was practically nil. Due to the failure of rabi rains the demand for rabi water was keen and was met as far as possible. The system irrigated about 14,000 acres.

Kadwa and Girna river works are two small irrigation systems in this circle. The area irrigated by these two systems was about 7,800 acres.

Barrage Gate Bridge—Reinforced concrete arches on the Right Bank during construction.

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Pravara River Works.—The system comprises—

(1) Wilson Dam, 1,600 feet in length, impounding Lake Arthur Hill at Bhandardara on the Pravara river, with a storage capacity of some 10,000 million cubic feet at present.

(2) a pick-up weir at Ojhar, 890 feet long, and

(3) two canals named the Pravara Right and Left Bank Canals, 33 miles and 48 miles long, respectively.

This system is now in full operation. The culturable area commanded by the canals lies in the Ahmednagar District, a tract of scanty rainfall and very liable to famine. The area irrigated was about 32,000 acres as against 24,000 acres in the previous year. The increase in the area was due to heavier demand for water for seasonal crops. Proposals to increase the storage are under consideration.

The Lloyd Dam at Bhatgar and the Nira Right Bank Canal.—The project comprises the Lloyd Dam at Bhatgar to replace the old Bhatgar Dam, a much smaller structure constructed some 40 years ago, for the Nira Left Bank Canal and the new Right Bank Canal 106 miles long. The new lake impounds about 24,000 million cubic feet of water and supplies the old Left Bank Canal and the new Right Bank Canal both of which take off from the pick-up weir on the Nira river at Vir, some 17 miles below Bhatgar. The project mainly benefits the western portion of the Sholapur collectorate—a tract notoriously liable to famine. The Lloyd Dam is now completed in all respects. Practically all deep cutting and high banks up to the end of the canal have been completed. The progress on distributaries and branches is satisfactory. The distribution system is being constructed on up to date principles and the latest types of measuring devices are being provided at distributary heads and also at frequent intervals on the channels. Irrigation has already commenced and the area irrigated during the year was about 14,200 acres.

Second Class Irrigation works.—These include numerous bandharas or weirs built across small streams, with a good natural supply of water for the purpose of raising the level of the water sufficiently to command the adjacent lands. In all there are about 300 of these small works in the Nasik Collectorate alone and a large number also exist in the West Khandesh District. A sum of Rs. 23,000 was spent on repairs and extensions and improvements of these works.

IRRIGATION DEVELOPMENT AND RESEARCH CIRCLE

Nira Left Bank canal and Shetphal tank.—This system forms part of a system which was one of the pioneer irrigation works in the Deccan and irrigates lands on the Left bank of the Nira river. The canal protects a tract with an extremely precarious rainfall in the Poona District. The system originally consisted of a storage reservoir at Bhatgar, a pick-up weir at Vir and a canal about 100 miles long with a tank called the Shetphal tank at the tail thereof used for the purpose of storing a portion of the surplus monsoon flow in the river. The scheme is financially the most remunerative of the larger protective irrigation works now in operation in the Deccan. The system irrigated about 68,000 acres.

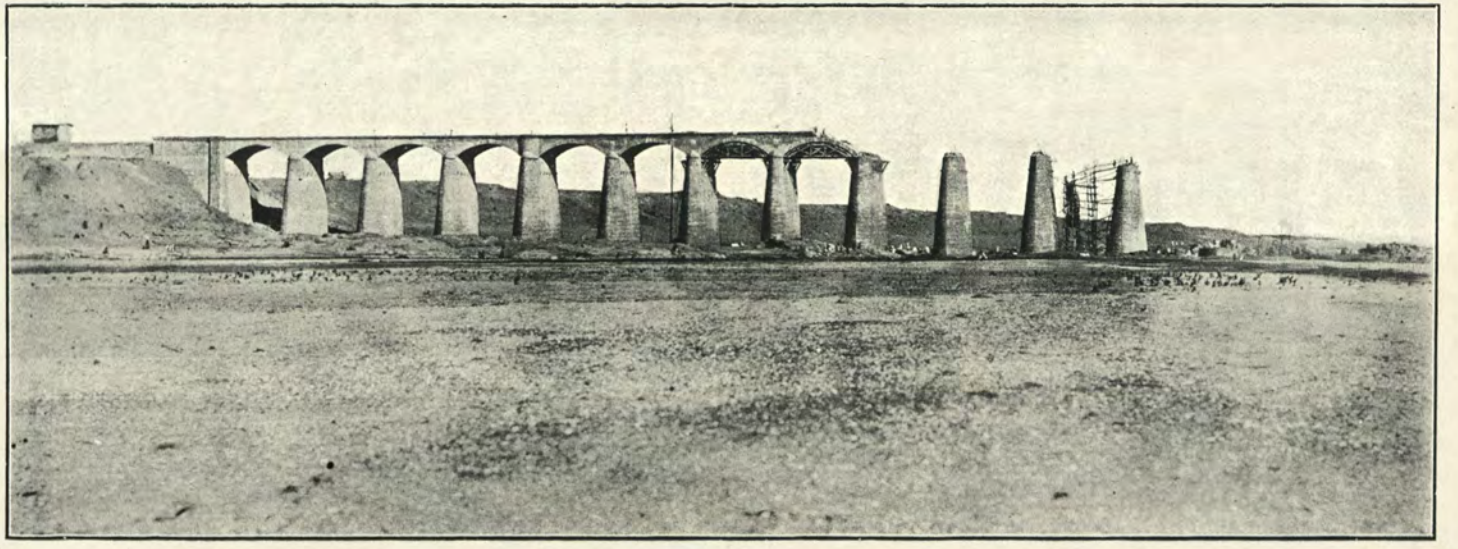
Nira Valley Development Project.—This project comprises remodelling the Nira Left Bank canal and the construction of an additional storage at Vir to supplement the storage at Bhatgar. The remodelling of the canal and surveys for remodelling distributaries were in progress.

SCIENTIFIC INVESTIGATION WORK

The scientific research side of irrigational problems and practice is being dealt with in the Special Irrigation Division. The principal subjects dealt with were :—

(1) Soil and sub-soil classification ; (2) Drainage of water logged lands and measure to prevent water logging ; (3) Reclamation of salt lands ; (4) Block formation and revision ; (5) Observation of sub-soil water levels ; (6) Improvements in distribution and measurement of water ; (7) Irriculture, *i.e.*, the inter-action of irrigation and agriculture ; (8) Effluent Irrigation ; (9) Soil physics ; (10) Hydrodynamic experiments and (11) Rain and river gauge works.

A most important part of the work undertaken by the Special Irrigation Division during the past has been the investigation of the lines on which irrigation methods can be adapted to meet agricultural requirements and the degree to which agricultural methods can be modified to meet irrigation necessities and limitations. The whole future of Deccan Irrigation depends on the satisfactory solution of this exceedingly complex problem and the research work already effected definitely shows that by readjustment of the present methods both Government and the cultivator will benefit enormously. It has also been proved that by improved methods of distribution the area irrigated with a given volume of water from a distributary can be increased by as much as 30 per cent. The aim of the system is to record



Bridge over the Tapti on Bombay-Agra Road.

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by means of modules and semi-modules correct discharges at suitable intervals. The direct advantages to the cultivators which must follow from a reliable and constant supply are very considerable, in that they will get better crops but the indirect benefits will also be great, in that when the system has been perfected, it will be possible to allow the internal distribution to be carried out largely by the cultivators themselves. The prevention of waste and reduction of the volume of water used will lead to less water entering the subsoil and thus to a reduction of the area of land damaged by water-logging. This in turn will increase the area available for cultivation.

To give irrigation officers an insight into the work done by this Division and to enable them to appreciate the importance of the inter-relation of irrigation and agriculture a two months course was held in August and September 1928 consisting of lectures, demonstrations and experiments. Several Irrigation Committees have been formed on the Nira Left Bank Canal with a view to serve as Panchas for purposes of panchanamas.

SOUTHERN CIRCLE

Among the irrigation works in this Circle, the Gokak canal is the most important. The system consists of a weir across the Ghataprabha river at Dhupdal, in the Belgaum District, 16 miles of main and branch canals and 36 miles of distributaries. The cotton mills at Gokak and the Madras and Southern Mahratta Railway were supplied with water as usual. The area irrigated by the canal during the year was about 9,750 acres. The Dharma canal stands next in importance in this circle. The crops raised on lands irrigated by the canal and by tanks fed by the canal were in good condition. The remaining irrigation works are small and are situated chiefly in the Dharwar Irrigation Division. Preliminary investigations were in progress for a storage reservoir at Sirur and a pick-up weir near Gokak, both on the Markandeya river, and a canal about 20 miles long intended to irrigate about 19,000 acres of lands in the Gokak Taluka.

RAILWAYS

The railway lines in the Bombay Presidency are not administered by the Bombay Government but are under the direct control of the Railway Board. The Railway Board has also the control of the Railway lines in the Indian States within the Bombay Presidency.

The total length of railways open for traffic in the Bombay Presidency, including Sind, was the same as that for the previous

year, *viz.*, 5,689·59 miles, as no new lines were opened for traffic during the year under review.

The construction of the Boriavi-Vadtal and Jambusar-Kavi Railways was completed. The former line was opened for traffic from 18th April 1929.

The works on the Samni-Dehej Railway were almost completed.

All the land required for the construction of the Vasad-Katana Railway was acquired and 90 per cent. of the formation and 40 per cent. of permanent way linking were completed.

The final location of the Belapur-Sheogaon Railway was completed.

The construction of the Northern loop, Mehrabpur to Pad Idan, of the Sind Left Bank Feeder Railways was in full swing. As regards the Southern loop, Nawabshah *via* Sakrand to Tando Adam and the Central chord, Tharushah to Sakrand, the final location survey work was completed.

Surveys of the following lines were completed or in progress :—

1. Bulsar-Dharampur Railway.
2. Asarva-Kapadwanj Railway.
3. Conversion from Metre to Broad gauge of the Hyderabad Chor Section.
4. Railway Lines in the area between Tando Mohammed Khan and Sujawal.
5. Jhol-Hiral Railway.
6. Pandharpur-Lonand Extension.

CHAPTER VIII

VITAL STATISTICS AND MEDICAL RELIEF

FOLLOWING on 1927, the record year of low death-rate, the year under report shows in comparison a high mortality. The health history of the Presidency from 1918, the year of the Influenza pandemic, judged by the total mortality figure, is one of steady progress up to 1922, the year of a record of low death-rate (23·61) and thereafter of gradual return to the low standard that normally prevailed. Thus the death-rate figure for 1923—25·89, for 1924—27·63, for 1925—23·66, for 1926—28·55, for 1927—25·71 and for the year under report—27·28 indicate the return to the 1911-15 mean of 27·56. The set-back is mainly due to four recurrent death factors, *viz.*, Plague, Fevers, Respiratory Diseases and Other Causes. The further increase in births for the year suggests in itself improvement in condition but it brought along with it more than the usual increase in the infant deaths that accompanies.

The increase appears in three separate major headings of causes of death. Thus comparing the figures with those of the preceding year " Fevers " show an increase of 11 per cent., " Respiratory Diseases " 11 per cent. and " Other causes " 9 per cent., while " Intestinal Diseases " show a reduction of 9 per cent. and the chief epidemic diseases—cholera, small-pox, plague and influenza combined show a reduction of 37 per cent. For Influenza alone of epidemic diseases, a low figure of deaths—228 was recorded, but there is reason to believe that it was more prevalent than in 1927, in a milder form generally, but with a virulence reminiscent of the pandemic of 1918 in two or three localised areas. The spread of Influenza is shown by the curves (Chart IV) of deaths from Respiratory Diseases which is the only general disease heading that continues to compare unfavourably with its pre-pandemic average. Similarly, if fever mortality during the year under report be compared with the figures for 1927 and also with the mean for previous five years, it would prove the same thing.

Compared with the mean of the previous five years 1923-27, there was a slight rise in mortality under Fevers (10·47 to 10·77), Respiratory Diseases (4·69 to 5·08), and Other Causes (7·88 to 8·46) while all other headings show a small decrease—Cholera (·45 to ·36), Small-pox (·30 to ·27), Plague (·72 to ·71) and Dysentery and Diarrhœa (1·37 to 1·22).

Births.—Among the civil European population of 19,247—266 births and 133 deaths were recorded against 248 and 172 respectively in 1927. The calculated birth-rate per mille for 1928 was 13·82 and the death-rate 6·91 as against 12·88 and 8·94 respectively in 1927.

Anglo-Indians numbered 10,221 and 345 births and 192 deaths were registered against 329 and 186 respectively in 1927. The birth and death ratios per mille were 33·75 and 18·78 as against 32·19 and 18·20 respectively in 1927.

Among the civil Indian population of 19,165,614—731,647 births were registered showing an increase of 25,362 over the figures for 1927 and also of 86,717 on the decennial mean figure—644,930. The year 1928 may be considered as satisfactory so far as the number of births is concerned. With the exception of 1914, the year under report shows the highest number of births on record. The birth-rate for the year for the Presidency as a whole was 38·17 against 36·85 during the previous year. For the Presidency proper excluding Bombay City and Sind, the rate was 42·54 against 41·32 and for the Province of Sind 24·63 against 23·05 in 1927. The rates recorded in other parts of India for the last two years are given below :—

	1928	1927
Madras	37·04	36·05
Bengal	29·57	27·07
Assam	31·54	30·25
Burma	25·85	25·08
Bihar and Orissa	38·27	37·64
United Provinces	38·24	36·73
Punjab	46·30	42·27
Central Provinces	46·51	45·58

It will be seen from the above table that an increase in the birth-rate was general throughout India.

In the Presidency as a whole, the birth-rate for rural areas was 40·09 and for urban areas 30·29 against 38·73 and 29·12 respectively in 1927. For the Presidency proper, excluding both Sind and Bombay City, the rural birth-rate was 44·10 and the urban 33·11 against 42·78 and 32·54 respectively in 1927. Of the 27 districts in the Presidency the highest birth-rate was recorded in West Khandesh (53·57) and the lowest (18·58) in Hyderabad. Eleven returned a birth-rate of 40 or more per mille of population, *viz.*, East Khandesh (52·22), Ahmednagar (50·50), Nasik (50·08), Sholapur (47·38), Broach (46·09), Satara (45·03), Kolaba (42·54), Surat (42·31), Belgaum

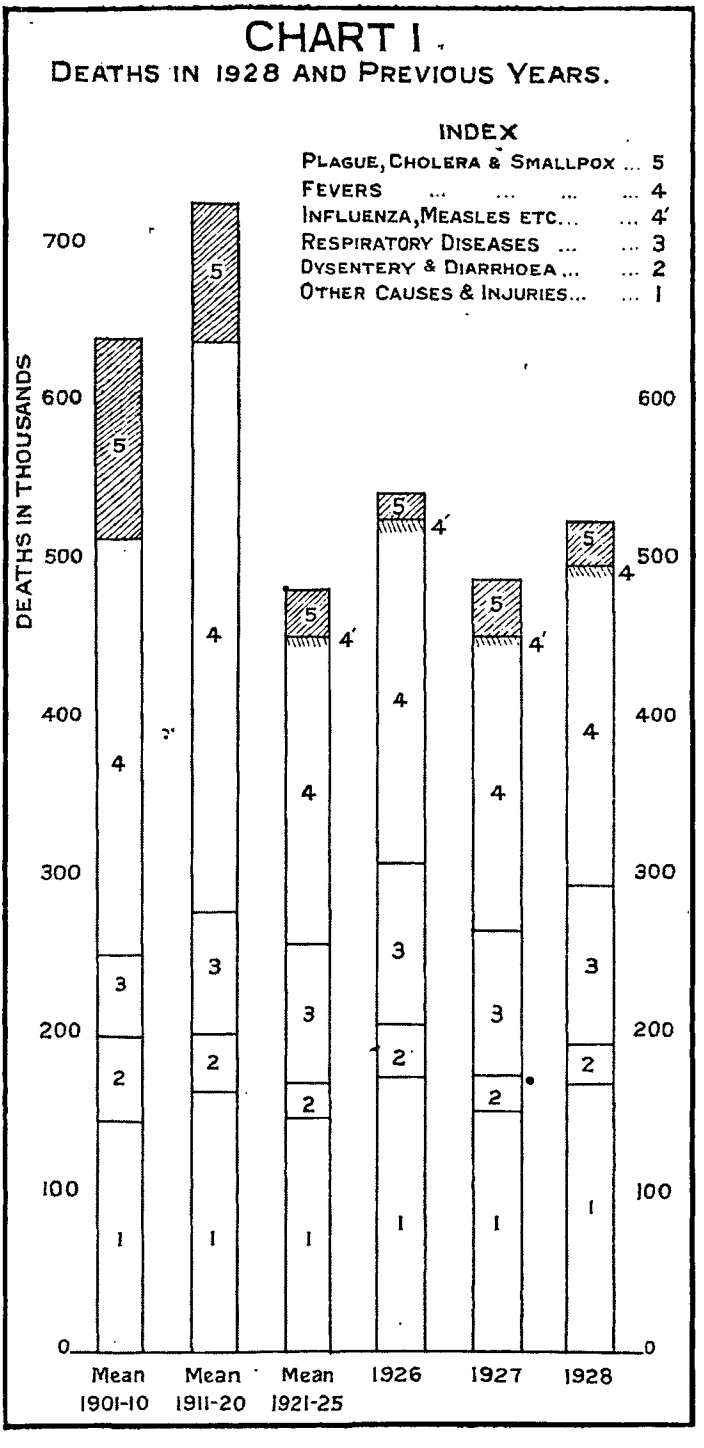


CHART I.
DEATHS IN 1928 AND PREVIOUS YEARS.
INDEX
PLAGUE, CHOLERA & SMALLPOX ... 5
FEVERS 4
INFLUENZA, MEASLES ETC... ... 4'
RESPIRATORY DISEASES 3
DYSENTERY & DIARRHOEA 2
OTHER CAUSES & INJURIES... ... 1
DEATHS IN THOUSANDS
700
600
500
400
300
200
100
0
Mean 1901-10
Mean 1911-20
Mean 1921-25
1926
1927
1928

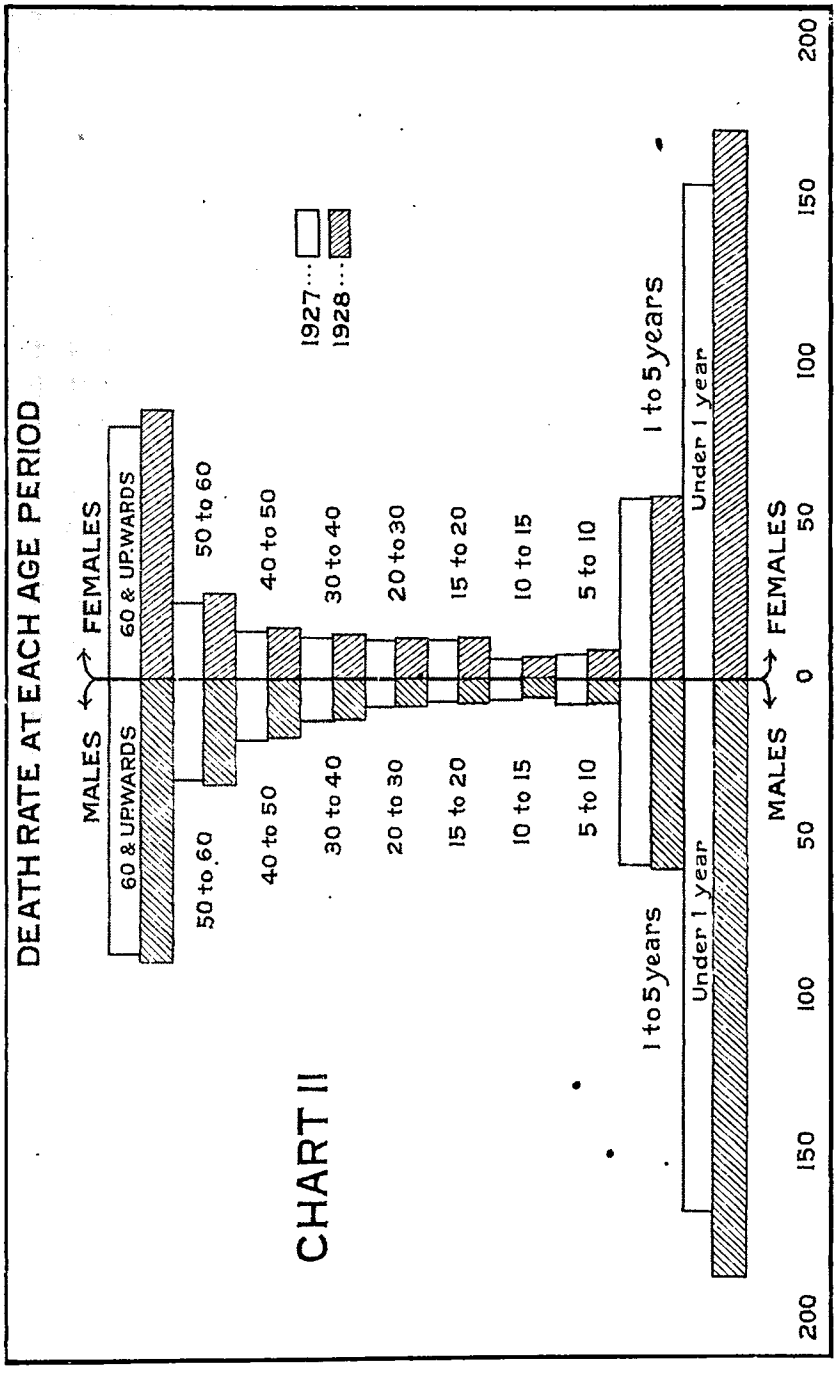
(41·54), Panch Mahals (41·14), and Bijapur (40·65). Of the 192 talukas, petas and mahals in the Presidency proper, 164 or as many as 85 per cent. returned rates over 35 per mille of population—47 of these areas yielding figures above 50. The rates varied from 87·48 in Pathardi in Ahmednagar and 73·63 in Sakri of the West Khandesh District to as low a figure as 20·26 in South Salsette and 16·99 in Poona City Taluka. The births recorded in Bombay City were 23,623 or 2,321 more than in the previous year equivalent to a birth-rate of 20·56—an increase of 2·02. Of the total number of births 380,159 were males and 351,488 females equal to ratios of 19·83 and 18·34 per mille of population. For every 100 female births there were 108·15 male births. Still births numbered 10,685 against 11,117 in the previous year.

Deaths.—The year showed an increase in the mortality over the previous year and also over the quinquennial mean. This rise is due to some extent to fevers, respiratory diseases and all other causes. Besides it is also to be noted that greater number of deaths amongst infants has largely contributed to swell the total mortality figure. The total number of deaths registered was 522,885 as compared with 492,891 in 1927 and 503,908 the quinquennial mean. 106·61 males died for every 100 females. The recorded death-rate for the whole Presidency worked out to 27·28 against 25·72 in 1927 and 26·29 the quinquennial mean. Excluding Bombay City and Sind, the death-rate for the Presidency was 29·92 against 28·03 in 1927. For other parts of India the death-rates recorded are as follows :—

	1928	1927
Madras	26·04	24·03
Bengal	25·55	25·06
Assam	22·16	23·47
Burma	21·28	19·55
Bihar and Orissa	25·29	25·08
Punjab	24·72	27·46
United Provinces	24·15	22·59
Central Provinces	33·66	31·31

The death-rates for rural and urban areas for the Presidency as a whole were 27·18 and 27·68 respectively against 25·49 and 26·56 in 1927.

Of the districts, the highest death-rates were returned by Satara (36·47), Nasik (35·59), Ahmednagar (35·73), Sholapur (34·71), Broach (34·16), East Khandesh (31·90), West Khandesh (31·28), Kanara (31·06) and Ahmedabad (31·05), and the lowest by Ratnagiri (24·48), Thana (24·07), Panch Mahals


DEATH RATE AT EACH AGE PERIOD
CHART II
MALES
FEMALES
60 & UPWARDS
50 to 60
40 to 50
30 to 40
20 to 30
15 to 20
10 to 15
5 to 10
1 to 5 years
Under 1 year
1927
1928
200
150
100
50
0

(23·54) and Bombay Suburban (18·12). The high death-rate in Satara was mainly due to the prevalence of plague and cholera, while in the districts of Ahmednagar, Sholapur, East Khandesh and West Khandesh, cholera was prevalent to some extent and in Nasik cholera and plague. In Kanara, the chief causes for the high mortality may be again attributed to malaria and dysentery and diarrhœa.

Infant Mortality.—There were 131,913 deaths under twelve months corresponding to a ratio of 180·30 per 1,000 registered births as against 114,009, or a ratio of 161·42 in 1927. The male and female rates were 188·37 and 171·56, respectively, as compared with 167·89 and 154·43 in the previous year. Throughout the presidency except Central and Gujarat Registration Districts mortality amongst infants was highest in the first month of life. The urban and rural infantile death-rates per 1,000 registered births for the Presidency as a whole were 250·71 and 167·38, respectively, as compared with 234·15 and 148·15 in the previous year. The highest rural infantile death-rate was recorded in Broach (238·88) and the lowest in Ratnagiri (92·79).

The Sholapur Maternity and Infant Welfare Association is doing good work. The Belgaum Branch of the Red Cross Society have started an Infant Welfare Centre in an area of 10,000 population selected in Belgaum town and Cantonment limits. The Centre is in charge of a qualified Lady Health Visitor appointed for the purpose, and it is reported that the work is making satisfactory progress. In Sind the Karachi Health Association maintains a Maternity Home named after Mr. Beherumal Thakurdas, which is gaining in popularity every year. At Hyderabad the training of untrained "Dais" in maternity work was conducted under the guidance of Miss Piggot whose organization has been expanding. The activities of the Red Cross and Health Societies, Hyderabad, were mainly directed towards maternity and child welfare work. The Mrs. Hamid Ali Red Cross Maternity Home, Larkana, and the Ishwari Bai Sitaldas Tirathdas Maternity Home, Shikarpur, also did useful work.

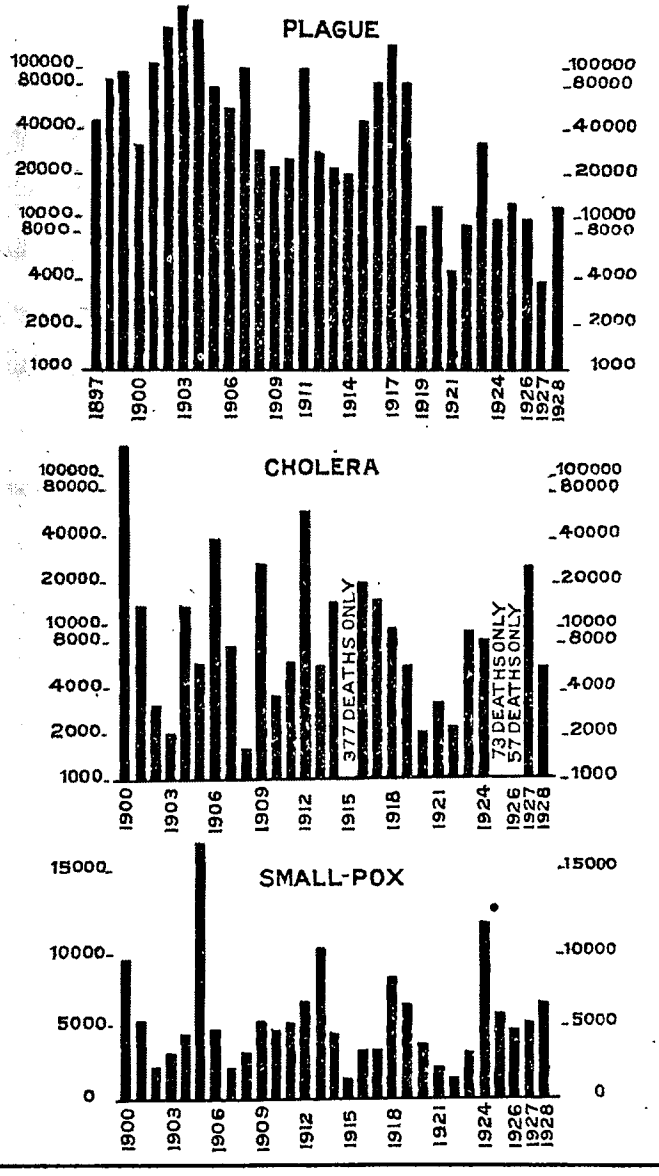
In Bombay City the number of deaths among infants under one year of age was 7,468, being 611 more than in 1927 but 2,362 less than the annual average in the ten years 1918-1927.

The salient features are the magnitude of the *role* played by debility and prematurity in the causation of death in the first 4 weeks of life and the large proportion of deaths from respiratory diseases during the remaining 11 months of infancy. The high

CHART IV

ANNUAL INCIDENCE OF DEATHS FROM EPIDEMIC DISEASES

SCALE FIGURES REPRESENT ACTUAL DEATHS FOR PLAGUE & CHOLERA. FIGURES ARE AT THEIR LOG: INTERVALS AND ONLY THOSE ABOVE 1000 ARE SHOWN.



rates recorded suggest the presence in Bombay of some adverse factor in addition to the poverty and ignorance which are chiefly responsible for high rates in western countries. The added factor affecting all classes is probably Malaria ; another factor which can hardly fail to enhance the infant mortality among the more ignorant portions of the population, is the practice of soothing babies by the administration of opium. The work which is being done in Bombay for the reduction of infant mortality may be described under the following heads :—

(1) Visits by the Municipal District Nurses for the purpose of getting into touch with prospective mothers and for discovering cases of sickness especially among women and children and unvaccinated children ; for inquiry into the condition of newborn infants and for giving instruction by homely talks as to the care and rearing of children, (2) Attendance on confinements, (3) Provision of necessaries and comforts during the lying-in period, (4) Maternity Homes, (5) Infant Milk Depots, and (6) Infant Welfare Centres.

The male and female death-rates among Hindus were 29·27 and 29·89 per mille, among Muhammadans 19·85 and 18·74, among Parsis 15·16 and 15·35, among Christians 17·50 and 19·24 and among Jains 16·36 and 19·39, respectively.

Deaths among all Indians totalled 522,885, cholera being responsible for 6,881, small-pox for 5,265, plague for 13,563, fevers for 206,356, dysentery and diarrhœa for 23,371, respiratory diseases for 97,428, injuries for 7,959 and all other causes for 162,062.

The following table shows the number of deaths in 1928 and the ratio per 1000 of population arranged according to causes and contrasted with the figures for 1927 and with the mean for the preceding five years :—

Causes	1928		1927		Mean for five years	
	No.	Ratio	No.	Ratio	No.	Ratio
Cholera	6,881	·36	26,153	1·36	8,748	·45
Small-pox	5,265	·27	5,091	·27	5,724	·30
Plague	13,563	·71	4,076	·21	13,900	·72
Fevers	206,356	10·77	186,543	9·73	200,713	10·47
Dysentery and Diarrhœa	23,371	1·22	25,447	1·33	26,282	1·37
Respiratory Diseases ..	97,428	5·08	87,963	4·59	89,897	4·69
Injuries	7,959	·41	7,873	·41	7,637	·40
Other Causes ..	162,062	8·46	149,745	7·81	151,006	7·88
All Causes	522,885	27·28	492,891	25·71	503,908	26·29

Charts illustrating total deaths and deaths by causes, death-rate at each age-period and annual incidence of deaths from epidemic diseases are attached.

EPIDEMIC DISEASES

Plague.—There was an increase in mortality from plague as compared with the previous year. Since 1918, there has been a big drop in the annual mortality. A return in 1923 to the high rate common before the great War was followed by a fall in 1924 and also in the years following till 1928 with slight variation. During the year under report, 13,563 deaths were registered equal to a death-rate of ·71 as contrasted with 4,076 and a death-rate of ·21 in 1927 and 13,900 and ·72 the quinquennial mean. Two hundred and fifty-seven deaths were recorded in Bombay City against 207 in 1927. No death occurred among the Europeans and the Anglo-Indians; 1,137 deaths were reported from Aden.

The heaviest mortality occurred in the Central Registration District. Satara was the worst affected district. It reported 8,239 deaths equal to a death-rate of 8·04. Next to Satara, Dharwar was badly affected and returned 2,492 deaths equal to a death-rate of 2·40. One more district badly affected was Nasik which reported 788 deaths equal to a death-rate of ·95. In Gujarat, Surat was the only affected district which returned 588 deaths equal to a death-rate of ·87. Sind was quite free. Native States returned 342 deaths as against 229 in 1927, Satara Agency and Kolhapur and S. M. C. States showing the highest figures, *viz.*, 186 and 140 respectively. Other States escaped entirely except Bhor which reported 16 deaths.

The total number of persons inoculated during the year under report was 132,340 as compared with 56,171 in the previous year. Out of these 126,262 were performed in British territory and 6,078 in Native States.

Cholera.—The number of deaths recorded from cholera was 6,881 against 26,153 in 1927 and 8,748 the quinquennial mean. The death-rate was ·36 against 1·36 in 1927 and a quinquennial mean of ·45. The urban and rural death-rates for the Presidency as a whole were ·19 and ·40 respectively. It will be noted that the epidemics of 1900, 1906, 1912 and 1919 were of great severity. All were years of abnormal monsoon. The year 1927 was also a bad cholera year. In 1925 and 1926 there were 57 and 73 deaths respectively. Although the disease appeared to have died out after 1924, cases did actually occur during the next two years and these cases though few in number were not confined to any one part of the Presidency. The

epidemic of 1928 though not so severe as that of the year previous, still affected all the parts of the Presidency except Gujarat.

In the Presidency proper, all the Collectorates with the exception of Broach, Kaira, Panch Mahals and Ahmedabad were more or less affected, while in Sind, three of the seven districts reported deaths. The epidemic was chiefly confined to the districts of Satara (1,676), Poona (919), Ahmednagar (909), Sholapur (844), East Khandesh (799), Nasik (733), and West Khandesh (340). Bombay City recorded 32 deaths against 80 in 1927. It prevailed to a greater or lesser extent in 152 Registration Circles infecting 1,102 villages. The epidemic reached its height in July during which 2,559 deaths occurred and had practically ceased by November, when 2,120 deaths were recorded. In December, there were only 72 deaths.

During the year under report, a grant of Rs. 15,000 was sanctioned by Government for measures against outbreaks of cholera, *e.g.*, supply of potash permanganate for disinfection of village water supplies, cholera treatments, and ingredients for Tomb's Mixture. In addition to the above, out of the total grant of Rs. 29,000 sanctioned for inoculation against plague, cholera and other epidemics, a sum of Rs. 26,458 was expended in connection with cholera and plague inoculation.

Small-pox.—There was a slight rise in mortality from small-pox as compared with the previous year, the total deaths recorded during the year under report being 5,265 (2,592 males and 2,673 females) against 5,091 in the previous year and 5,724 the mean of previous five years. The death-rate was ·27 against ·27 in 1927 and ·30 the quinquennial mean. The incidence of the disease was thus on the normal line.

Of the 5,265 deaths from small-pox, 1,491 were of infants under one year and 2,531 of children between one and 10 years of age. Seventy-six per cent. of the mortality occurred during the first six months of the year, March recording the maximum mortality.

Influenza.—A review of the influenza mortality from 1918 showed this year's epidemic to have been the mildest of all since 1926, the total number of deaths recorded during the year under report being 228, as compared with 267 in the preceding year. Out of these Bombay City recorded 77 deaths against 78 in 1927.

Malaria.—44,683 deaths from malaria were recorded in the whole Presidency against 45,641 in 1927, the death-rate being 2·33 against 2·38 in 1927. Excluding Sind, the rate was 1·24 against 1·00 in 1927. The urban and rural death-rates were

Malaria Survey—School children with enlarged spleens.

Malaria Survey—Examining children for spleens and parasites. [*Facing page 182*

·74 and 2·72, respectively, as compared with ·84 and 2·76 in 1927. As usual the rural death-rates are considerably higher than urban. The highest rural death-rates from malaria were recorded in Sind. Larkana district showed a rural death-rate (12·06), Nawabshah (9·82), Karachi (8·31), Sukkur (8·12), Thar and Parkar (7·81), Hyderabad (6·34), and Upper Sind Frontier (5·59). Except Larkana, all the rural districts showed a lower incidence of malaria during the year as compared with the previous year. By urban circles, the highest death-rate from malaria was recorded in Garhiyasin (24·47) and the lowest in Sukkur (·07). In the Presidency proper, Poona (3·92) returned the highest rural rate and the rate for Jambusar (11·45) was the highest for towns.

For the treatment of cases of malaria 33 S. M. S. Officers were appointed on special duty.

Grants were placed at the disposal of the Director of Public Health for free distribution and cheap sale of quinine. An endeavour was made to bring supplies of the drug within reach of the villagers and others.

HOSPITALS AND DISPENSARIES

The Report on Civil Hospitals and Dispensaries for the triennium 1926-28 states that the scheme for the expansion of the J. J. and Allied Hospitals is nearing completion. The B. J. Hospital for Children and the Ellappa Balaram Pavilion were completed and the former taken into use. The construction of the Sir Currimbhoy Ebrahim Memorial Dental College and Hospital and the quarters for 99 Nurses is approaching completion. The Sir Sassoon David Hospital (Pavilion No. 1) and the quarters for Resident Medical Officers and House Physicians and House Surgeons are expected to be ready early in 1930 and the rebuilding and extension of the C. J. Ophthalmic Hospital is likely to be completed by the end of that year. Under the scheme for the extension of the G. T. Hospital, the Prince of Wales wards and the New Quarters for the Matron and Sisters were opened and taken into use, and the work on the North Wing of the Hospital was completed. In the mofussil several important works were carried out during the triennium at the Civil Hospitals, Bijapur, Ahmedabad and Nasik, and the Sassoon Hospitals, Poona.

The number of institutions, which was 638 in the beginning of the triennium, increased to 666 and the number of local and municipal fund dispensaries from 331 to 348 at the end of 1928.

The total number of patients treated during the year 1928 was 3,708,159 as compared with 3,356,895 in 1927 and 3,205,171 in 1926. The mean number treated during the triennium was 3,423,408 against 2,716,986 in the previous triennium, showing an increase of 28·1 per cent. over the latter period. The increase was contributed by in-door as well as out-door patients. The in-patients numbered 99,410 in 1928 against 93,873 in 1927 and 83,428 in 1926. The average number of in-patients treated during 1926-28 was 92,237 against 77,513 in 1923-25. The number of out-patients was 3,608,749 in 1928, 3,263,022 in 1927 and 3,121,743 in 1926, with an average of 3,331,171 against 2,639,475 in the preceding triennium.

There has been a considerable increase in the number of women seeking medical relief at hospitals and dispensaries. The number rose from 714,866 in 1926 to 743,275 in 1927 and to 823,961 in 1928. The average attendance of this class of patients at general hospitals and dispensaries was 668,781 as compared with 526,579 in the preceding triennium. The steady increase in the attendance of women at these institutions is mainly due to the employment of women doctors at the main hospitals in the mofussil. The figures are indicative of the growing popularity of the general and female hospitals and dispensaries.

The mean daily average attendance of in-door and out-door patients for the triennium was 4,376·5 and 32,209·0 respectively against 3,764·1 and 26,660·1 for 1923-25.

The average number of in-patients cured during the triennium was 55,214 against 48,110 in 1923-25. The average mortality for the period was 6,504 against 6,487 in 1923-25. The ratio of deaths per cent. to the total treatment was 7·1 as compared with 8·3 for the previous triennium.

The number of beds available was 7,351 in 1928 as compared with 6,448 in 1925. The increase in the number of beds was attributable mainly to the opening of the B. J. Hospital for Children with 100 beds, the King Edward VII Memorial Hospital with 334 beds and other municipal institutions in the City of Bombay.

During the year 1928 nearly 145,400 surgical operations were performed on 144,546 persons with a mortality of 0·4 per cent.

The total receipts, inclusive of cash balance, amounted to Rs. 68·40 lakhs in 1928 as against Rs. 65·68 lakhs in the previous year, of which Rs. 5·09 lakhs were contributed by Local Boards, Rs. 10·47 lakhs by Municipalities and Rs. 32·49 lakhs by Government. The interest on invested capital

Byramjee Jeejeebhoy Hospital for children in the compound of Sir J. J. Hospital, Bombay.

[*Facing page 184*

was about Rs. 73,000, while of a total of Rs. 14·41 lakhs under miscellaneous receipts Rs. 2·38 lakhs were contributed by the several Nursing Associations.

The total expenditure amounted to Rs. 65·51 lakhs as compared with Rs. 62·72 lakhs in 1927, an increase of Rs. 2¾ lakhs. The net expenditure for 1928 was Rs. 63·35 lakhs.

The Medical Schools have been provided with well equipped laboratories for imparting practical instruction in scientific subjects and arrangements are being made for the teaching of Experimental and Chemical Physiology, which has been newly introduced in the course of Practical Physiology in the curriculum of the Schools under the revised regulations for Licentiate Examinations.

SANITATION

Municipalities.—The creation of a new Municipality of Manmad in Nasik District and the abolition of Wambori in Ahmednagar District kept the number of municipalities unchanged. There were 156 municipalities, with a total population of 2,682,553. Their aggregate income excluding opening balance amounted to Rs. 378 lakhs.

Local Boards.—The aggregate income of 27 District Local Boards and 222 Taluka Local Boards amounted to Rs. 198 lakhs. Of this nearly Rs. 10 lakhs were spent on works connected with public health.

Village Sanitation.—Under the Bombay Village Panchayat Act (IX of 1920) and the Village Sanitation Act of 1889, 606 Village Panchayats and Sanitary Committees were working during the year. In addition, there were 26 Notified Area Committees and two Sanitary Boards.

Laboratories.—There are two Public Health Laboratories at present working, one in Poona and the other at Karachi. A Laboratory at Ahmedabad is conducted by the Ahmedabad Municipality under the guidance of a qualified medical officer.

Pilgrim Centres.—The chief day of the Ashadhi fair at Pandharpur fell on 28th June 1928. The total number of pilgrims who paid the tax was 154,127 and there were 5,262 exemptions. The arrangements at Kurduwadi in connection with the provision of sanitary and medical facilities were under the control of the Civil Surgeon, Sholapur.

The usual medical arrangements were ready well before the pilgrims began to arrive in Pandharpur. Thirteen Sub-Assistant Surgeons and 19 medical students were employed. The Infectious Diseases Hospital was in charge of the Municipal Medical Officer. The in-coming and out-going pilgrims were

inspected at the railway station and at the octroi nakas. Ambulances for the immediate removal of the sick were provided at the nakas.

The pilgrimage lasted for five days. 126 cases of cholera including those of diarrhœa were admitted in the hospital of which 76 died. 34 cases were from among the followers of the Alandi palkhi.

At the Kartiki fair in November the attendance was about 114,000, and the smaller Pandharpur fairs, the Kartiki festival at Alandi, the fairs at Shirala and Shingnapur were also catered for in respect of sanitary and preventive arrangements under the guidance of the public health staff.

In the Western Registration District the principal fairs at Nasik and Trimbak were the Nivritti in January, Mahashivaratra in March, the Ramnavami in April and the Kartiki in November 1928. The number of pilgrims during these "Parvanis" varied considerably, ranging from about 1,500 during the Kartiki to 40,000 during the Nivritti fair. The sanitary arrangements were excellent under the guidance of the Assistant Director of Public Health, Western Registration District, Nasik.

Saundatti-Yellamma in the Belgaum district, Yamnur in the Dharwar district and Gokarn in the Kanara district are three important fair centres in the Southern Registration District to which people from all parts of the Presidency are drawn. The total number of pilgrims attending the fairs was about 10 to 50 thousand in the first, 60 thousand in the second and 30 thousand in the last one.

In Gujarat, the festivals at Vautha in Dholka taluka and Shuklathirth in Broach taluka were attended by about 100,000 and 8,000 pilgrims, respectively. Sanitary arrangements were satisfactory. The "Manikthari Punem" Fair was held at Dakore on 27th October 1928. As cases of influenza were occurring at Dakore the District Magistrate at the advice of the Assistant Director of Public Health advised the people not to visit the place.

The Lal Shahbaz Fair at Sehwan (Sind) was held from 11th to 13th February 1928 and was attended by about 25,000 pilgrims.

Health and Baby Weeks.—The Health and Baby Week celebrations which are being held in the Presidency for the last six years are making steady progress. During the year 112 shows were held.

In Gujarat Registration District a Rural Health Section was held in the Presidency Agricultural Exhibition in November 1928. There was an unusual rush of visitors.

Lady Wilson Village Maternity Association.—The work of training dais under the Lady Wilson Village Maternity Scheme is progressing. During the year a new centre was opened in Sholapur town.

The Annual General meeting was held at Government House on 19th September 1928. A Central Council of the Baby Week Association, the Bombay Presidency Infant Welfare Society and the Lady Wilson Village Maternity Association was created for co-ordination of work and Lady Sykes has happily become its first President.

Government sanctioned a sum of Rs. 10,000 to be given towards grant-in-aid for these centres, but the condition that the grant in each case should be limited to one-third of the total expenditure has been waived for two years.

VACCINATION

In the year 1928-29,. 652,900 persons were primarily vaccinated and 144,000 persons re-vaccinated against 651,000 and 115,000 in the previous year. There was an increase of 1,859 in primary and 29,024 in re-vaccinations as compared with last year's figures.

The total number of vaccinations and re-vaccinations performed in the whole Settlement of Aden was 9,086 and 899 against 14,105 and 2,561 during the preceding year. There were 11 deaths from small-pox against 2 in the previous year.

Of the primary vaccinations seen by vaccinators 513,298 or 88·95 per cent. were successful, 607 or ·10 per cent. were unsuccessful and the results could not be ascertained in the remaining 10·95 per cent. of the cases. The percentage of successful re-vaccinations was 23·04. The results in 40·59 per cent. could not be ascertained.

The Vaccine Institute, Belgaum, had a successful year's work. About 65,700 c.c. of lymph were manufactured and 1,258,670 doses issued as compared with 1,294,200 during the previous year. Besides the vaccinators of the Presidency, lymph was supplied to Baroda, Kotah and Jhalwar, Idar, Kathiawar, Palanpur and Mahi Kantha Agencies and Civil and Military Medical Officers.

The cost of vaccination came to Rs. 6·64 lakhs. The average cost of each successful case of vaccination was Rs. 0-15-8.

Excluding Bombay City, Aden and the five Cantonments of Ahmedabad, Ahmednagar, Hyderabad, Belgaum and Deolali, the Vaccination Act is in force in 11 municipal towns of this Presidency—Bandra, Kurla, Dhulia, Bhusawal, Ahmedabad, Karachi, Hyderabad, Sukkur, Rohri, Larkana and Ahmednagar.

THE HAFFKINE INSTITUTE

According to the annual report of the Haffkine Institute for the year 1928, the Institute sent out about two million doses of Plague Prophylactic during the year, a considerable increase on the last year's demand which was only 825,310 doses. The United Provinces of Agra and Oudh and the Punjab are still the largest consumers.

The Report says that the process of manufacture of the prophylactic has remained unaltered. But the discovery by Dr. Gore of the fact that the blood agar is the medium of choice for the growth of B. pestis has enabled the authorities to detect with greater certainty contaminating organisms in the prepared vaccine, and thus secure greater purity of the finished product.

The Plague Expert Committee of the Health Organisation of the League of Nations at their first session in Calcutta in December 1927 laid down the lines of future research in plague and they laid stress on the " Investigation into the comparative epidemiological *role* of the various species of fleas in plague transmission in selected areas of India." This investigation was taken up in August last and the work is still proceeding.

In the Pharmacological Department the work on the chemotherapy of plague has been continued. The indigenous drugs section has been studying the value of certain drugs and the results obtained are embodied in the Report. " These investigations are of scientific value ; but those who expect the immediate discovery of wonderful therapeutic agents in large numbers to replace the remedies in use at present are sure to be disappointed. Investigations into the nature of indigenous drugs is a problem which involves much time and labour. It is a matter of regret that the pharmacological department is understaffed," says the Director.

Researches in anæmia by Major Sokhey and his assistant have revealed the great prevalence of anæmia resembling pernicious anæmia among men and women in Bombay. Their studies show that anæmia of sprue and of pregnancy have great resemblance to pernicious anæmia, and they believe that the so-called anæmia of pregnancy is not a distant entity, but merely an aggravated condition of anæmia commonly present in non-pregnant women.

The statistical figures for the Anti-rabic Department show that the value of the anti-rabic centre is well understood by the public and that full use is made of the centre. During the year 1,332 persons applied for anti-rabic treatment. Against 718 persons who received treatment, 458 persons reported here who did

not need any anti-rabic treatment. They were advised regarding keeping the offending animal under observation, and their wounds were dressed. The Institute issued 4,254 treatments to various outside centres.

A comprehensive study of Sprue, started by Col. Mackie and his colleagues in 1923 and resumed in 1925, was brought to a close this year when Col. Mackie left the Institute to take up the appointment of Public Health Commissioner with the Government of India. The broad conclusions arrived at by these researches were summarised in the last report and most of the papers foreshadowed have either appeared during the year or are in the press.

" The cost of the plague, anæmia, maternal mortality and tuberculosis enquiries amounting to Rs. 1,37,677 was borne by the Research Fund Association. In future years the situation as regards grants from the Association is likely to be altered radically," continues the Report. " The Fletcher Committee which was referred to in the last year's report, has recommended the establishment of the Central Research Institute at Dehra Dun, and the Rockefeller Foundation has decided to build the Public Health Institute at Calcutta.

" So the position is that Bombay is to receive no aid from any outside agency to help it to make provision for post-graduate training in Tropical Medicine or Public Health and Hygiene. Bombay is as important a centre of medical education as any in India, but its promising graduates must continue to go elsewhere to complete their training in Tropical Medicine. Calcutta has a flourishing School of Tropical Medicine and will soon have a first class Institute of Public Health and Hygiene; while Bombay has neither. One School of Tropical Medicine is not enough for the whole of India, and it is high time for Bombay to make provision for itself.

" It is a melancholy fact that Bombay is making no headway in providing for research work in Medicine. So far all the research carried on at this Institute has been subsidised by the Research Fund Association, and had it not been for substantial help from that Association the Pharmacological and Biochemical Units of this Institute would possibly not yet be in existence. Should the Research Fund Association stop their contributions, most of the research work now in progress should have to be abandoned, with little hope of being resumed in the near future."

Earth-eating and Salt-licking.—The report has some interesting remarks regarding earth-eating and salt-licking

habits. "Earth-eating is a habit which overspreads all countries, and breaks ethnological boundaries of every sort; it is found among the people of every continent, and apparently of almost every race. In India it extends throughout the length and breadth of the land, and is indulged in by both the sexes, at any time of life, in all states and grades of society. There are as many as six theories to account for this practice which is known by the name of "geophagy," but none of them is satisfactory.

"We believe that this widespread craving for earth of some kind is the psychological expression of a physiological need, that the habit primarily rests on a physiological basis. We know that wild beasts collect in numbers to lick or eat earth from definite areas called "licks." We are inclined to attribute earth-eating among men and salt-licking among wild animals primarily to a deficiency in one or more minerals. A superficial examination of the soils sought after by wild animals points to the fact that they are closely related to, if not the same as, the materials used by earth-eaters. One thing which stands out prominently is that, whatever it is the wild animals seek in the salt-licks, it is not sodium chloride. What it is may be revealed by a careful analysis of numerous samples of soils from the tracts visited by them. This is what we are now doing."

The Report describes the social life of the Institute with special reference to what is known as "The Critics Club." This club came into existence in 1924 and has for its members the medical and scientific staff of the Institute. Its objects are to increase the social relations between the staff of the different departments, to hold meetings when researches carried on in different departments may be reviewed and criticised, and to act as stimulus for the junior members of the staff to undertake research work. The various subjects discussed by the Club are enumerated in the Report.

VETERINARY

Bombay Presidency.—Contagious diseases were reported from all districts in the Presidency proper and Bombay City during the year 1928-29. Information of 3,715 outbreaks was received from villages and 3,703 outbreaks were attended. There was an increase of 2,069 outbreaks attended over the number attended in 1927-28. The total number of attacks and deaths was 94,879 and 15,835, respectively, as against 44,797 attacks and 8,031 deaths during the previous year. The increase in the number of attacks was chiefly due to foot and mouth

disease, and that of mortality to black quarter, rinderpest and hæmorrhagic septicæmia.

Rinderpest was reported from all the districts, excepting Panch Mahals, Broach, Surat, Bijapur, Kanara and Ratnagiri, as well the City of Bombay. It was somewhat severe in the Thana and Kolaba districts. There were 6,629 attacks and 4,831 deaths recorded against 3,463 attacks and 1,717 deaths in the previous year.

Foot and mouth disease prevailed to a very great extent during the year and was reported from all the districts excepting the City of Bombay. The total number of villages affected was 2,152 in which 74,691 cattle were attacked and 180 died. In the preceding year 831 villages were affected recording 33,339 attacks and 123 deaths. Bijapur, Belgaum, Dharwar, Kanara and Ahmednagar districts suffered heavily. Hæmorrhagic septicæmia affected 4,981 head of cattle and caused 4,459 deaths, Kaira district suffering the most from the ravages of this disease. Black quarter was reported from 13 districts and was responsible for 5,698 attacks of which 5,330 died. The mortality was greatest in the Ahmednagar district.

The number of villages visited by the Veterinary Surgeons was 5,985 as against 3,248 in the previous year. During their tours 57,580 animals for contagious diseases and 19,553 for non-contagious diseases were treated by them against 26,163 for contagious and 13,087 for non-contagious diseases during the last year.

There were 105 veterinary dispensaries during the year. The total number of in-patients treated was 5,278 against 4,713 and that of the out-patients 154,864 against 148,787 in the previous year. Medicines were supplied to 51,977 cases against 45,946 in the preceding year.

Sind.—The total mortality reported among cattle from contagious diseases increased from 4,682 in the previous year to 6,824 in the year under report. This was due to a number of outbreaks especially of rinderpest in the Upper Sind districts.

There were 371 outbreaks of rinderpest affecting 9,534 head of cattle and causing 4,621 deaths ; 76 outbreaks of foot and mouth disease affecting 4,424 cattle and resulting in 36 deaths ; while hœmorrhagic septicæmia was responsible for 143 outbreaks, 1,243 attacks and 1,147 deaths.

Preventive inoculations against rinderpest were carried out in the case of 204 outbreaks, the number of animals inoculated

being 15,697 against 13,460 inoculated in 145 outbkreaks during the previous year. The number of inoculations against hæmorrhagic septicæmia was 2,492.

There were 18 veterinary dispensaries working during the year. The aggregate number of cases treated at the several dispensaries rose from 27,323 in the previous year to 28,521 during the year under report, and the number of animals treated on tour decreased from 7,125 in the previous year to 4,546 during the year under report.

The total cost of the Civil Veterinary Department in the Presidency proper was Rs. 4·11 lakhs and in Sind Rs. 1·41 lakhs.

CHEMICAL ANALYSERS

The work of the Chemical Analysers to Government in Bombay and Sind is connected with the protection of the public either by the examination of the data relating to crime or suspected crime or by the examination of food-stuffs, water, etc. The medico-legal cases investigated during 1928 in Bombay totalled 868 of which 404 were cases of suspected human poisoning, 55 cases of suspected animal poisoning, 382 stain cases and 27 miscellaneous cases. Of the cases of suspected human poisoning poison was detected in 181 cases involving the poisoning of 176 persons, 102 of whom died.

In the Laboratory at Karachi 763 medico-legal cases were investigated, 52 of them being cases of suspected human poisoning. These included an instance of poisoning of 67 persons of whom 27 died. Poison was detected in 18 only.

The examination of stains for blood or other evidences of crime is also an important part of the work of the Chemical Analysers. Five hundred and sixty-five such cases were examined during the year in Bombay and Karachi.

WILD ANIMALS AND VENOMOUS SNAKES

The Report on the destruction of wild animals and venomous snakes for the year 1928 showed that the number of wild animals destroyed during that period decreased from 10,843 to 8,875. Thana was responsible for the destruction of 2,532 animals, Dharwar 1,501, Ratnagiri 1,127, Kanara 1,002 and Belgaum 939.

The total number of snakes destroyed during the year rose from 32,533 to 36,535. Of these Ratnagiri was responsible for the destruction of 15,726, Thar and Parkar 9,551, Dangs 2,454, Nawabshah 2,202, Sukkur 1,304 and Thana 1,227.

The number of persons reported killed by wild animals totalled 43 as against 63 in the previous year, while the mortality caused by snake-bite increased from 1,409 to 1,490 of which Ratnagiri was responsible for 214, Thana 132, Thar and Parkar 121, Nawabshah 117 and Satara 104.

The rewards paid for the destruction of wild animals and venomous snakes amounted to Rs. 1,115.

MENTAL HOSPITALS

There are six Mental Hospitals in the Presidency and the number of patients treated in them was 2,298, an increase of 189 over the previous year, the number of admissions being 724. The increase was contributed mainly by the Mental Hospitals at Yeravda and Dharwar. The daily average strength was 1,657·7 as compared with 1,534·2 in the previous year. The total number of criminal insanes confined in the Mental Hospitals during 1928 was 189 (176 males and 13 females) with a daily average strength of 111·5. During the year 289 patients were discharged cured, 95 improved, 29 not improved and 32 were discharged for various reasons. The health of the patients was generally good.

Of the persons admitted during the year, 39 were Europeans and Eurasians, 70 Indian Christians, 432 Hindus, and 149 Muhammadans and 34 belonged to other castes. Domestic servants furnished the largest number of admissions followed by clerks, labourers, agriculturists, merchants and traders, students and mendicants. The great majority of them were between 20 and 40 years of age.

In those cases where the causes of insanity could be ascertained mental stress and mental instability were the chief causes of lunacy.

There were 153 deaths against 171 in 1927. The ratio of deaths per cent. of the daily average strength was 9·2 as compared with 11·1 in the preceding year. The chief causes of deaths at the several Mental Hospitals during the year were Cerebral Atrophy, Phthisis, Pneumonia, Nervous diseases, Dysentery, Enteritis, Epilepsy, Diseases of the circulatory system, Malaria, Stuporous melancholia, Syncopy and Diseases of the Heart.

The net expenditure on Hospitals amounted to Rs. 5·21 lakhs as against Rs. 4·62 lakhs in 1927.

Patients were employed as in previous years on gardening, weaving, etc., and helping in the domestic duties connected with the Mental Hospitals.

ACWORTH LEPER ASYLUM, MATUNGA

The Acworth Leper Asylum was founded in the year 1890 by H. A. Acworth, Esqr., C.I.E., I.C.S., who was then the Municipal Commissioner for the City of Bombay, from public donations, and it provides accommodation for the segregation of pauper Indian lepers. It is in charge of a Resident Superintendent who works under the orders of the Board of Management, consisting of 20 members, of whom 3 are appointed by Government, 5 by the Municipal Corporation of Bombay and 12 are co-opted annually.

The cost of maintaining lepers who are not residents of Bombay is borne by Government, and that of Bombay lepers by the Municipality. The other sources of income are the garden and the sewage farm and occasional donations.

The asylum accommodates 364 lepers, 222 males and 142 females. The total number of persons treated in the Asylum during the year 1928 was 531, of whom 368 were males, 160 females and 3 female children. 417 were Hindus, 38 Muhammadans and 76 of other castes.

Seventy-three deaths occurred in the Asylum during the year.

Lepers who wish to work are provided with employment in the garden or the sewage farm and are paid a small allowance which they use in buying small luxuries from a co-operative shop which is provided for them on the Asylum premises under their own management.

The expenditure amounted to Rs. 1,17,300.

KONDHWA LEPER ASYLUM, POONA

The Asylum is situated about six miles to the south of Poona near the village of Kondhwa. It was established in the year 1913 by the United Free Church of Scotland Mission to Lepers, which has its headquarters in London, and which carries on most important work for sufferers from leprosy throughout India and other countries. The Asylum buildings were erected by the Mission with the assistance of a grant from Government. The Mission provides without charge the services of a Superintendent and a Chief Medical Officer. A Subordinate Medical Officer, appointed locally, is in charge under the Superintendent.

Towards the maintenance of the Asylum, Government makes a monthly capitation grant, while the Poona City and Suburban Municipalities, the Poona Cantonment Committee, and the Poona District Local Board make grants of a fixed annual amount.

The Asylum accommodates 150 lepers, 75 males and 75 females. The total number of persons treated in the Asylum at the end of the year was 103, composed of 62 men, 39 women and 2 children.

Early cases of leprosy are treated by the latest method. In chronic cases treatment by way of amelioration only is possible. The special treatment is at present being given to 17 men, 9 women and one child. No person was discharged as cured. Seven untainted children are cared for by the Mission to Lepers in schools for healthy children in Missionary Boarding Schools. The general health of the inmates was satisfactory throughout the year. Four persons died during the year due to exhaustion.

The aim of the Leper Mission which is responsible for carrying on this Asylum is by kind and sympathetic treatment of the sufferers to induce them voluntarily to enter the Asylum and remain in it. Many of them remain continuously and have no desire to leave. Though the Asylum is under Christian management complete freedom is given to every inmate to follow the rules of his or her own religion. In this matter there is no compulsion of any kind.

EMIGRATION AND IMMIGRATION

Only skilled labourers are recruited for emigration from the Ports of Bombay and Karachi, and they are engaged by the authorised recruiting Agents in Bombay under agreements approved by Government. During the year under review a slight falling off in the wages of skilled labourers recruited for service abroad was noticed. In Sind the flow of recorded emigration has increased due to the detection of illicit emigration.

During the year 1928, the total number of emigrants who signed agreements before the Protector of Emigrants, Bombay, and proceeded overseas was 1,101 and the number of those who returned after expiry of the period of the contract and termination of their agreements was 1,394. The number of skilled workers who proceeded from the Port of Karachi was 527 and 15 emigrants returned to that Port during the year.

The majority of the emigrants who proceeded from the Ports of this Presidency were carpenters, drivers, surveyors, cooks, firemen, pumpmen, oilmen, fitters, brick-layers, millwrights, painters, wiremen, turners, sweepers, blacksmiths, accounts clerks, loco-clerks, chargemen, station clerks, shorthand typists, carriage examiners, plumbers, masons, moulders,

compositors, signalmen, butlers, electric operators, crane-drivers, dhobies, etc.

With the exception of the usual migration to Bombay, Ahmedabad and Sholapur and to the two Khandesh districts during the cotton season, there was no inter-divisional migration worth mentioning in the Presidency Proper during the year although inter-district migration continued as usual. Cultivators emigrate to Bombay and other busy centres to seek employment after the harvesting season is over. They leave their homes in January and return about the beginning of the cultivating season. This is essential to supplement their annual income from agriculture as the produce of their lands is not sufficient for the maintenance of their families. The recent riots and the incessant strikes in the Bombay mills discouraged emigration to Bombay to some extent. Owing to the good harvest and a succession of fair seasons emigration in search of employment was less than usual. There was the usual immigration of labourers and artisans from Marwar, Cutch and Kathiawar to Ahmedabad City and Viramgaum. The loco. shops at Dohad continued to draw men from different places. During the sugarcane crushing operations large numbers of labourers from non-irrigated tracts of Poona, Ahmednagar and adjoining districts were attracted to the irrigated areas. Sholapur, being a great centre of industry, attracted a large number of labourers from distant and surrounding villages of the district and also from the Nizam's Dominions. The majority of them were weavers who were able to find without much difficulty employment both in the mills and hand-loom factories. Barsi is another centre of trade to which labourers from adjoining villages migrate in sufficient numbers. Low caste people such as Mahars, Wadars, etc., get sufficient work on the Nira Right Bank Canal in the Malsiras and Sangola Talukas. There was also corresponding seasonal migration of field labourers to the chief centres of cotton and groundnut cultivation. Forest cuttings and salt pans in Uran and the Tata Hydro-Electric Works in Kolaba required skilled and unskilled labour. Cartmen, coolies and skilled labourers from Goa territory and the neighbouring districts immigrated temporarily as usual to work in the forests and the spice gardens in the above-ghat talukas. Brohis, Pathans, Balochis and other wandering tribes came down as usual in the Larkana district from the adjoining hills during the winter season for clearance and other work and left when the hot season set in. For the past few years however an appreciable number of these

temporary immigrants have remained in the district engaged on barrage works.

There were about 200 emigrants to South Africa from the Surat, Kaira, Kolaba and Ratnagiri districts and about 1,800 men, women and children from the Nasik, Thana and Dharwar districts were recruited for the Assam Tea Plantations.

CHAPTER IX

LOCAL SELF-GOVERNMENT

DISTRICT MUNICIPALITIES

DURING the past decade the policy of Government has been to give more and more power to Local Bodies and, where control is exercised, to use that control solely for the purpose of safeguarding the interests of the tax-payers, especially where Government funds have been lent for local purposes. This policy is especially noticeable in the case of municipalities. In Bombay City the powers of the Corporation are practically uncontrolled, while in the mofussil Government control has been to a very considerable extent relaxed. There are in the Presidency 28 Municipal Boroughs and 127 Municipalities. The former are governed by the Bombay City Municipalities Act, 1925, and the latter by the provisions of the Bombay District Municipal Act, 1901.

The principal duties of municipalities lie in the direction of the provision and maintenance of public and utility services such as roads, dispensaries, water-supply, sanitation and education. They have power to raise funds both by direct and indirect taxation. Moreover, when the circumstances of a case require it and the Local Body is prepared to make adequate efforts to help itself, Government renders assistance both by loans and grants-in-aid towards the cost of big undertakings. By this means Poona, Lonavla, Nasik, Jalgaon, Karad, Sholapur, Bijapur, Dharwar, Hubli, Hyderabad, Sukkur and other towns have been provided with an improved water-supply and Poona with a complete system of underground drainage. In some cases, where the question of good water-supply is of more than local importance, waterworks have been constructed entirely at Government expense. Pandharpur, a great pilgrim centre, is a case in point. Town improvements and the opening out of congested and insanitary areas are other objects for which Government make liberal grants. Considerable improvements in the sanitary services of urban areas have been brought about by Government's assistance. Municipalities with a population of 15,000 and over may appoint Health Officers and Sanitary Inspectors and Government bear two-thirds of the cost of the Health Officers and one-half of the cost of Sanitary Inspectors.

Municipalities are now allowed practically a free hand in the matter of the selection and appointment of their Chief Officers.

During the year under report the Municipality of Gogho in the Ahmedabad District was abolished with effect from 1st October 1928. Two of the town Municipalities, *viz.*, Indapur and Saswad in the Poona District, were superseded and Committees of Management were appointed at those places. Triennial elections were held in the several Municipalities during the year. The Municipalities of Mahableshwar and Satara Suburban in the Central Division and of Yamnur, Gudguddapur, Gokarn, and Ulvi in the Southern Division continued to consist wholly of nominated members. In Sind the Municipal Boroughs of Hyderabad, Sukkur, Shikarpur and Larkana were re-constituted in accordance with the provisions of the Bombay City Municipalities Act, 1925.

The aggregate ordinary income of the municipalities excluding items under the head "Extraordinary and Debt" increased by nearly Rs. 10 lakhs to Rs. 241 lakhs. All the Divisions in the Presidency proper and in Sind showed an increase. The incidence of taxation was highest at Karachi (Rs. 15-2-4) and lowest at Ashta (Rs. 0-11-11). The aggregate expenditure, including items under the head "Extraordinary and Debt," amounted to Rs. 367½ lakhs, an increase of Rs. 5¼ lakhs over the previous year. The various municipalities now have loan debts amounting to Rs. 191 lakhs, the Ahmedabad Municipality alone being responsible for Rs. 62·18 lakhs. Nearly Rs. 3¾ lakhs were repaid by the municipalities during the year.

Government, in reviewing the working of the municipalities in the Bombay Presidency during 1927-28, remarked as follows :—

"A satisfactory feature regarding municipal administration is the increasing realisation on the part of the public of the importance of public health and the growing demand for such amenities as municipal water supply, drainage, conservancy and electric lighting. The list of municipal wants grows year by year but the public have not yet fully appreciated the fact that without an increase in taxation they cannot expect to realise these aspirations. The demand for modern amenities has already outrun the resources of most municipalities. Nevertheless, the total income (excluding debt services) is less by Rs. 4½ lakhs than that realised in the previous year. It is no doubt true that the Presidency is passing through a period of trade depression and that the taxable capacity of large classes of the public is not at present expanding. Nevertheless, it is the

duty of the municipal councillors themselves to give a definite lead in initiating such measures as will unquestionably enure to the health and convenience of the public even though the consequent additions to taxation necessarily entail some measure of unpopularity temporarily. During the existing financial stringency the resources of Government available for aiding municipal schemes are limited but it is possible to undertake many schemes which can be made self-supporting from the outset and which the municipalities are in a position to finance by floating loans independently of Government. Government are always prepared to assist municipalities by the provision of expert technical and financial advice on such proposals."

"It is an unfortunate fact that the administration of many municipalities has been marred by communal and party factions and that many municipal councillors do not exercise their functions with a single eye to the public interest. A reference has already been made to the number of such councillors who have abused their positions and set a bad example to the public by defaulting in the punctual payment of their municipal dues. The frequent adjournment of municipal meetings owing to lack of quorum is another distressing symptom of slackness on the part of the councillors. The attention of Government has also been drawn to the reluctance of several municipalities to make special services (for instance, in the matter of conservancy) self-supporting and their tendency to transfer burdens on this account from those classes which primarily reap the benefit of them to the general rate-payer. If municipalities were more strict in observing the orders of Government regarding the ear-marking of the income from wheel-tax and road-tolls for the upkeep and improvement of municipal roads and of the sanitary cess for purposes for which it is levied, this state of affairs would not continue to escape the attention of the electorate. With the gradual growth of education it may be anticipated that a sense of civic consciousness among the general public will become more acute, and it is to be hoped that as time goes on, self-seeking councillors who obtain election from other motives than a desire to serve the town in which they live, will find it more difficult to secure election. The efficiency of many municipal services leaves much to be desired, and it is regretted that in the course of the year no general improvement has been observed."

BOMBAY MUNICIPALITY

The total receipts for the year under review amounted to Rs. 315·33 lakhs against Rs. 317·08 lakhs in the preceding

year, showing a decrease of Rs. 1·75 lakhs which was due to the non-receipt of certain taxes from the G. I. P. Railway. The expenditure for the year amounted to Rs. 327·50 lakhs as against Rs. 314·46 lakhs, an increase of Rs. 13 lakhs of which a sum of Rs. 7 lakhs was on account of a non-recurring contribution to the Bai Jerbai Wadia Children's Hospital. The net result of the transactions for the year disclosed a deficit of Rs. 12·17 lakhs against a surplus of Rs. 2·62 lakhs in the preceding year. The principal decreases were under General Tax (6 lakhs), Water Tax (6 lakhs), Halalkhore Tax (1 lakh) and wheel Tax and Fire Tax (1 lakh). The incidence of taxation per head decreased from Rs. 21-7-5 to Rs. 20-13-4 for the year on the basis of the estimated annual increase in the population of the city over the census figure of 1921.

The expenditure on capital works amounted to Rs. 55 lakhs of which Rs. 30·33 lakhs were spent on loan works, including the Tansa Completion Scheme, and Rs. 23·61 lakhs on development schemes. Reduction of debt amounted to Rs. 26·13 lakhs. The loan liabilities of the Corporation at the close of the year stood at Rs. 18·48 lakhs. The total sinking fund investments up to 31st March 1929, totalled Rs. 307·68 lakhs.

The outstanding of all taxes at the end of the year amounted to Rs. 21·97 lakhs against Rs. 16·39 lakhs, showing an increase of Rs. 5·58 lakhs which was due to the dispute with the G. I. P. Railway Company who claim preferential teatment for assessment of their properties since the Railway became State-managed, and to general trade depression and disturbances in the City. The total of the arrears due by the G. I. P. Railway alone amounted to Rs. 8·47 lakhs.

Building operations are going on along the Dadar-Kumbharwada Road now called Bhawanishankar Road and the locality is being developed throughout its entire length. The Dighee tank has been filled in and the reclaimed site is now being used as a recreation ground and so is the low-lying ground in Nardulla Park which has been filled in. The carriage way along Lady Jamshetji Road has been asphalted from Bandra Causeway to the Bombay Woollen Mills and all the traffic from Bombay to Bandra and the suburbs use this Road which has developed into a very important thoroughfare. The ground for the Mahim Park has been cleared and some of the plots have specially been laid out for Cricket, Tennis, Badminton, etc., and let out to various clubs.

The total quantity of water received during the year from all sources, *viz.* Tansa, Vehar and Tulsi lakes, amounted to

27,801 million gallons or an average of 76·16 million gallons per day against 25,718 million gallons or an average of 70·5 million gallons per day in the previous year. The total rainfall at Tansa was 15 per cent. below the average of the preceding five years, while the total rainfall at Vehar, Tulsi and Powai lakes was above the average of the last five years by 1 per cent., 14 per cent. and 19 per cent. respectively.

The number of calls received by the Fire Brigade was 445 of which 103 were false alarms, against 396 and 111 during the preceding year. The total damage by fires amounted to Rs. 20·21 lakhs against Rs. 18·46 lakhs in the previous year.

The number of live-births during the year was 24,017 against 21,685 in the previous year. The birth-rate per 1,000 persons was 18·5 against 16·7 in the preceding year. The total deaths during the year numbered 27,312 being 321 less than in the previous year. The death-rate per 1,000 persons was 21·0 against 21·3 in the previous year and was lower than the figure recorded for any year since 1872. The mortality among infants was 7,468 against 6,857 in the previous year. The rate of infant mortality per 1,000 births was 311 as compared with 316 in the preceding year. The King Edward Memorial Hospital had 334 beds, and 8,141 in-patients and 48,160 out-patients were treated during the year. The total expenditure incurred on the maintenance of the hospital was Rs. 4·81 lakhs.

The total number of schools at the close of the year was 341 against 344 in the previous year. Two new schools were opened and five were either amalgamated with other schools or closed. The total number of pupils was 49,659 against 50,249 in the previous year. The number of teachers was 1,920 against 1,936 and that of special teachers was 151 against 152 in the previous year. The total expenditure amounted to Rs. 30·12 lakhs against Rs. 29·51 lakhs in the preceding year showing an increase of Rs. 61,614. Owing to the mill strike throughout the year and the communal riots which took place in the last quarter of the year the progress of free and compulsory education in F and G wards was seriously hampered.

LOCAL BOARD ADMINISTRATION

Every Local Board is presided over by a president who is elected from amongst the non-official members of the board. In addition a vice-president is also similarly elected. The funds at the disposal of the boards consist chiefly of the local fund cess on Land Revenue, but there are other sources of

revenue, such as proceeds of ferries, tolls on Local Fund roads, quarrying fees, etc. The boards have also the power to levy, with the sanction of the Commissioner, such local taxes as a local authority is authorized to impose under section 80A (3) (a) of the Government of India Act. In addition, considerable grants are made by Government for education, the improvement of communications, water-supply and village sanitation, and the proper equipment and maintenance of dispensaries.

In 1927-28 Government's contribution to the expenditure of local boards under the more important heads of Education, Medical and Civil Works compared with the total expenditure under the respective heads was as shown below :—

	Government contribution	Total expenditure
	Rs.	Rs.
Education	91,64,605	1,19,65,837
Medical	1,60,821	11,50,477
Civil Works	24,45,747	52,97,140

The greater part of the revenue is usually spent by the District Board on works of general utility to the whole district, but each taluka board has funds at its disposal to enable it to carry out and maintain works of purely local utility for which it is primarily responsible. At least one-third of the net revenue from the local fund cess and the cess on water rate, must be spent on education.

There was no change in the number of District Local Boards (27) and Taluka Local Boards (220) during the year 1928-29. All District and Taluka Local Boards had non-official Presidents and Vice-Presidents except the District Local Board of Sholapur which was under the management of the Collector owing to its supersession. The total membership was 4,297 of whom 3,312 were elected. The average percentages of members present at each meeting of the Taluka and the District Local Board were 70·64 and 77·96 in the Northern Division, 71·5 and 81·1 in the Central Division, 61·13 and 73·78 in the Southern Division and 60·90 and 72·50 in Sind.

The aggregate income of the Boards was nearly the same as last year (Rs. 214 lakhs). The incidence of taxation was highest in Broach and Ahmednagar (Re. 0-9-7 each) and the lowest in Ratnagiri (Re. 0-1-0). Expenditure declined by Rs. 8⅓ lakhs to Rs. 217¾ lakhs, Education (Rs. 116¾ lakhs), Medical Relief (Rs. 12 lakhs) and Public Works (Rs. 47¼ lakhs) being the principal items of expenditure.

A Government Resolution reviewing the administration of Local Boards for the year 1927-28 remarked as follows:—

"The administration of the District Local Board, Bombay Suburban District, during the year under report was progressive under the guidance of its President, Mr. Naik, aided by the efficient work of the Chief Officer and the Engineer.

In Sind, on the whole, the local boards discharged their functions with an eye to the public good. The expansion of the income of the Boards during the year without an accompanying increase in expenditure is not a healthy sign. Some of the Boards, notably the District Local Boards of Karachi and Thar Parkar, have accumulated balances immensely in excess of their requirements and the reasons assigned for these swollen balances are not in the opinion of Government sound. There is an insufficient expenditure on roads, towards the maintenance and construction of which Government contributed grants of no less than Rs. 5,61,000 in the year under report. The crying need in Sind is for roads and until the Boards show greater activity in the matter, this need will not be satisfied. Greater attention should also be paid to the provision of medical and veterinary relief.

In the Central Division administration of the District Local Boards except that of Nasik and Sholapur and most of the Taluka Local Boards was on the whole satisfactory. It is reported that the work of the Engineering Department of the District Local Board, West Khandesh, was not altogether satisfactory due to the inefficiency of the engineers employed by the Board. The administration of the Parola Taluka Local Board was not satisfactory. The reports of the District officers and the Enquiry Officer, Mr. A. H. Dracup, revealed the fact that the administration of the District Local Board, Sholapur, was brought to a standstill in the year under report owing to the irreconcilable hostility between Brahmins and Non-Brahmins as well as inability or unwillingness on the part of the members to realise their responsibility. The result was that the Board was superseded by Government for a period of three years and the administration of the Board was placed in the hands of the Collector. The affairs of the District Local Board, Nasik, were also in a state of chaos. Defalcations and corruptions were rampant. The Public Works branch was full of irregularities and the administration of the School Board was a disgrace. The enquiry held by Mr. A. H. Dracup has revealed a condition of affairs which has resulted in a number of prosecutions.

In the Southern Division the year's administration was on the whole satisfactory though the working of the Public Works Section of the Boards still leaves much to be desired.

In the Northern Division the Boards on the whole spent during the year on communications and water-supply works much more than the Government grants received by them for these purposes and endeavoured to fulfil the object of Government in making liberal grants to them. It is satisfactory to note that the District Local Boards of Surat and Thana spent large amounts on the repairs of their roads. The most important and unfortunate event of the year was the heavy rain of the last week of July 1927 which resulted in heavy floods that caused considerable damage to the property of local boards and of the people and a temporary cessation of communications in certain areas especially of Kaira, Ahmedabad and Broach districts. It is a matter of great satisfaction that both the official and non-official agency worked shoulder to shoulder in rendering prompt relief to afflicted persons by the distribution of grain for seed, and of food, clothes, medicines, building materials and liberal tagavi grants for allied purposes. The Bombay Central Flood Relief Fund, the Sourashtra Seva Samiti of Ranpur and the District Flood Relief Committees did very useful work in this direction. Grants amounting to Rs. 32,233 were distributed among the affected District Local Boards of Ahmedabad, Kaira, Panch Mahals and Broach for repairs to their school buildings damaged by the storm out of the special grant sanctioned by Government in the Educational Department."

BOMBAY IMPROVEMENT TRUST

The expenditure on capital works was Rs. 1·34 lakhs as against Rs. 8·83 lakhs in the preceding year. The work of providing gas lights and surfacing the roads was continued in several schemes.

In all 1,137 cases including the outstanding balance of 1,132 from the previous year came before the Land Acquisition Officer and out of these 841 cases remained outstanding at the close of the year. Awards amounting to Rs. 8·37 lakhs were made for land aggregating 53,528 square yards, an average rate of Rs. 15·97 per square yard as against Rs. 8·33 per square yard for the previous year.

The area of developed land permanently leased increased from 21·15 to 21·55 lakhs square yards and the rental from Rs. 26·1 to 26·6 lakhs. The area of unleased developed land at the close of the year was 15·29 lakhs square yards, as against 15·59 lakhs square yards as at the close of the previous year.

In 1928-29 completion certificates were granted to 32 new buildings and in addition permission was given for the occupation of 30 buildings almost complete. Further accommodation was also made available by private enterprise. The balance in favour of the Trust of new tenements provided on their estates including those erected by the Development Department and the several Mill Companies over tenements demolished increased during the year from 14,820 to 15,024.

The average population in the Board's chawls and semi-permanent camps was 33,846. The average death-rate for all chawls per 1,000 is 7·95 which showed a slight increase as against 7·06 in the preceding year. The death-rate in each of the Board's chawls and camps was, however, considerably lower than that of the respective municipal sections.

The total yearly rental of the 10,074 rooms (including shops and godowns) and 214 looms in the Trust chawls amounted to Rs. 9·90 lakhs and the revenue actually collected was Rs. 7·79 lakhs or 71·83 per cent. of the total demand including the arrears of the previous year. The net annual return on the chawls worked out to 3·27 per cent. on the outlay. The Board have to pay interest and sinking fund charges at 4·61 per cent. per annum on money spent prior to 1919 and at 6·35 per cent. per annum from 1920 to 1925-26. The Board has thus to pay Rs. 3·79 lakhs over and above the net income from these chawls, which represents a loss of Rs. 38 per room per annum on an average.

The number of plots disposed of was 40 as against 46 in the previous year and their total area and capital value were 45,150 square yards and Rs. 11·38 lakhs, respectively, as against 85,702 square yards and Rs. 10·17 lakhs, respectively, for the previous year. The collection of ground rent amounted to Rs. 28·20 lakhs and the rents realised from buildings acquired but not demolished and from lands let for cultivation, etc., amounted to Rs. 11·03 lakhs.

The Capital Account stood as follows :—

Opening balance ..	.. Rs. 68·64 lakhs.
Loan receipts ..	.. Rs. 18·48 lakhs.
Sale-proceeds ..	.. Rs. 3·65 lakhs.
Expenditure ..	.. Rs. 42·60 lakhs (including a deficit of Rs. 28·31 lakhs on the general account).
Closing balance ..	.. Rs. 48·17 lakhs.

The expenditure on acquisition and works was Rs. 9·98 lakhs as against Rs. 11·62 lakhs in the previous year and the

expenditure under management and establishment and incidental expenses was Rs. 4·28 lakhs as against Rs. 9·54 lakhs in the previous year, which included Rs. 4·76 lakhs spent on account of stamp duty on Government of India advances.

The total borrowings of the Trust as on 31st March 1929 stood at Rs. 15 crores 94 lakhs involving payment of interest and sinking fund charges of nearly Rs. 91·4 lakhs per annum.

An analysis of the General Account (Revenue) shows the net revenue (excluding the receipts from the municipal contribution of Rs. 23 lakhs and expenditure on interest and sinking fund charges) was Rs. 39·1 lakhs.

BOMBAY PORT TRUST

In framing the estimates of receipts for the year 1928-29, the Trustees were mainly guided by the trade conditions prevailing in the latter half of the previous year, 1927-28. It was anticipated that the improvement which had set in would be maintained during the year under report. The receipts under all departments (excluding special receipts), after taking into account a decrease of about Rs. 5 lakhs per annum in revenue at the docks and bunders in consequence of the 40 per cent. reduction in the wharfage rate on bulk petrol and the 50 per cent. reduction on liquid fuel exported as bunkers, were estimated at Rs. 280·14 lakhs, or approximately Rs. 1 lakh below the actuals of 1927-28. These expectations were more than realized, for the actual receipts amounted to Rs. 286·08 lakhs or Rs. 5·94 lakhs more than the estimates. This constitutes a record in the history of the Trust, being Rs. 5·01 lakhs in excess of the receipts of the previous year.

The total ordinary expenditure budgetted for was Rs. 279·01 lakhs, but supplementary grants to the extent of Rs. 2·85 lakhs had to be sanctioned during the course of the year for unavoidable items not foreseen when the budget was framed. Owing, however, to the continued exercise of rigid economy in all departments, the actual expenditure for the year was only Rs. 278·95 lakhs, a saving of Rs. ·06 lakhs on the original estimates and Rs. 2·91 lakhs on the revised estimates.

The budgetted surplus for the year was Rs. 58,600 under General Account and Rs. 54,570 under Pilotage Account; the actual result was a surplus of Rs. 5·95 lakhs under General Account, which has been transferred to the Revenue Reserve Fund, and Rs. 1·17 lakhs under Pilotage Account, transferred to the Vessels Replacement Fund.

After transferring the year's surplus the Revenue Reserve Fund stood at Rs. 80·40 lakhs, the actual market value being

Rs. 68¾ lakhs. In addition to the Revenue Reserve Fund, the accumulated Sinking Funds and equated loan repayments amounted to Rs. 466·19 lakhs while adequate reserves totalling Rs. 94·40 lakhs have been set aside for special purposes such as fire insurance, depreciation and emergency replacements. Capital Works financed out of Revenue Reserve during the years 1916 to 1921 amounted to Rs. 47 lakhs. No capital loan has been raised for the past four years and the capital balances in hand at the end of the year were over Rs. 50 lakhs.

There was no increase in port or dock charges during the year under review. The Trustees have reduced the surtax on dock and bunder wharfage and other charges from 50 per cent. to 33⅓ per cent. with effect from 1st April 1929. Inclusive of this reduction, which will cost about Rs. 16·84 lakhs a year, the Trustees have reduced rates and charges during the last three years to the extent of twenty-five lakhs per annum without impairing their financial position or depleting their accumulated reserves to any appreciable extent. This has been rendered possible partly by the improvement in trade conditions, but mainly by drastic and sustained retrenchment in working expenses and the avoidance of further liabilities on capital account.

The cargo handled at the docks and bunders amounted to 6,707,000 tons, an increase of 58,000 tons above the volume of the previous year. Imports accounted for about 50·3 per cent. and exports 49·7 per cent. of the total tonnage.

The fumigation of American cotton imported into India through this port continued throughout the year under review but the imports were on a considerably reduced scale. 59,241 bales were landed and fumigated prior to delivery, as against 221,100 bales in the preceding year. On the recommendation of the Indian Central Cotton Committee, the Government of India sanctioned a refund of fumigation fees at the rate of 8 annas per bale on the quantity imported and fumigated during the period 12th July 1927 to 6th August 1928.

Vessels which entered the docks or were berthed at the Harbour Walls (excluding ferry steamers) totalled 1 966 with an aggregate tonnage of 4,828,376 net register as against 2,027 vessels with a tonnage of 4,864,344 in the preceding year.

There was a falling off in the occupation of the dry docks, the number of vessels docked being 167 against 194 in 1927-28. The total tonnage decreased to 660,595 tons, being 35,820 tons less than the previous year.

The Ballard Pier berth was used by 186 vessels during the year and 333 postal and passenger trains were run to and from the Station, connecting with the incoming and outgoing mail steamers. The additional passenger berth on the Alexandra Dock Harbour Wall accommodated 54 vessels.

The Docks Hamallage (Labour) Department satisfactorily met all demand for labour during the year. The attendance of the labourers continued to be satisfactory and was not affected by the industrial disputes nor was there any interruption of work during the riots in Bombay in February 1929. The average number of labourers engaged daily was 2,297 and the highest number employed on a single day was 5,019. The inclusive labour charges averaged 4·23 annas per ton of cargo handled.

On the land estates, the most noticeable feature was the keen demand for godown accommodation at the Cotton Depôt, owing to the excellent cotton crop. The Trustees sanctioned a substantial reduction of godown and jaitha rents at the depôt with effect from 1st September 1928, which, with the reductions sanctioned previously, aggregated Rs. 3·80 lakhs per annum or 23 per cent. saving to the Trade since the opening of the depôt in 1923. The Fire Insurance Association also agreed on a reduction in insurance rates on cotton stored in the depôt.

The foreign inward and outward traffic on the Port Trust Railway aggregated 2,003,000 tons against 1,860,000 tons during 1927-28, the principal increases being in cotton, groundnuts and sundries. An increase of 9,256 wagon-loads has also to be recorded in local traffic, principally under grain and seeds, groundnuts, linseed and manganese ore. The railway carried 47 per cent. of the total railborne traffic in and out of Bombay and the freight earnings collected during the year on traffic booked or received on account of the G. I. P. and B. B. & C. I. Railways amounted to Rs. 358 lakhs. The ratio of working expenditure (Rs. 17·32 lakhs) to receipts (Rs. 29·17 lakhs) was the lowest on record. Expenditure in this Department has been retrenched by Rs. 10·14 lakhs or 37 per cent. since 1922-23, whereas on the other hand the receipts have risen from Rs. 23 lakhs to Rs. 29 lakhs during the same period; the net improvement is therefore nearly Rs. 16 lakhs per annum and the Railway is now practically covering its capital cost.

In pursuance of the declared policy of the Board to avoid further commitments on loan account until trade conditions are more settled, Capital expenditure during the year under review

was restricted to an absolute minimum ; it amounted to Rs. 8·73 lakhs, the lowest figure since 1901-02.

In pursuance of an undertaking given by the Trustees in 1927 to the Indian Merchants' Chamber to devise means for encouraging and helping Indian officers of the Mercantile Marine to qualify for appointment to the Bombay Pilot Service in future vacancies, the Trustees decided to endow two annual scholarships of the value of Rs. 100 per mensem each, tenable for a period of three years from the date of passing out of the I.M.M.T.S. " Dufferin ", and subject to the selected cadets obtaining appointments as apprentices in one of the recognised Steamship Lines and continuing their sea career during the period of the scholarship. The conditions and rules governing the grant of the scholarships have been framed in consultation with the Governing Body of the " Dufferin ". The award will be made by selection annually from among those cadets who obtain Extra leaving certificates from the " Dufferin ". The Trustees consider that the scholarships should prove an incentive to the best cadets and assist them materially at the outset of their sea career, and that the scheme will provide a future nucleus of selected officers who, after obtaining their Master's Certificate, will be eligible to apply for such vacancies in the Pilot Service as may hereafter occur.

With a view to enable junior Indian engineers to qualify for promotion to higher grade appointments in the Trust's Engineering service, the Trustees sanctioned a scheme providing for the deputation of two of their junior engineers to Great Britain where arrangements have been made for them to be articled to selected Engineers or Contractors' firms of standing under whose supervision they will undergo a two years' course of practical training in constructional marine and engineering works. The full cost of this scheme will be met by the Port Trust.

The Trustees also have under consideration a scheme for affording preliminary training facilities at their Workshops for selected apprentices of an approved standard of education whose parents are in a position to send them abroad subsequently for a course of training. In such cases the Trustees will assist in getting the apprentices placed for training at suitable Works in Great Britain and a probationary appointment of Assistant Mechanical Superintendent is to be created on the Port Trust staff which will be open to selected Indian candidates who have completed the requisite training in India

and abroad, with a view to permanent confirmation in future vacancies if found suitable.

The first work financed out of the recently constituted Employees' Welfare Fund was the erection of a Maternity Home and Infant Welfare Centre at the Port Trust dock labourers' quarters at Wadi Bunder at a cost of Rs. 22,570. The Maternity Home, which was opened by Her Excellency Lady Wilson on the 16th November 1928, has accommodation for six cases at a time, with provision for future extensions, and is equipped on the most modern lines. The management of the Home and Centre is undertaken by the Bombay Presidency Infant Welfare Society who provide the medical staff, medicines and milk for distribution ; the Port Trust contributes Rs. 500 a month towards the expenses, in addition to paying for the electricity and gas, water charges, telephone rental and maintenance of the building. The Home has proved extremely popular and during the first six months of its existence 70 patients have been accommodated. Owing to the increasing demand a scheme for extension is now being prepared.

KARACHI PORT TRUST

The total revenue of the Karachi Port Trust for the year 1928-29 amounted to about Rs. 71 lakhs and the expenditure to Rs. 67 lakhs. The imports landed at the Ship Wharves during the year totalled 720,500 tons against 630,500 tons during the previous year. The total shipments from the Ship Wharves for the year were 661,000 tons against 760,300 tons in the previous year. Sixteen steamers arrived from Australian Ports with 126,000 tons of wheat. There was a slight decrease in cotton shipments.

Nine hundred and sixty-seven steamers of all kinds entered the Port with a tonnage of 2,570,117 against 950 and 2,488,849 respectively, in the previous year. Of the above, 763 were of British Nationality. Of 204 Foreign steamers, 55 were German, 52 Italian, 25 American, 23 Norwegian, 20 Japanese, 16 Dutch, 9 Swedish, 2 French and 2 Greek.

Fourteen pilgrim ships embarked 7,820 pilgrims for the Hedjaz during the year and 12 arrived with 10,443 pilgrims.

ADEN PORT TRUST

The Port of Aden which affords safe accommodation for vessels up to 30 feet in draught is administered by a Board of Trustees constituted under the Aden Port Trust Act V of 1888. Vessels of greater draughts can be handled by working the tides, the mean range of ordinary spring tides being 6·7 feet.

A Dredging Scheme estimated to cost about Rs. 38 lakhs was sanctioned by Government in May 1928. The work of deepening and extending the harbour was commenced on 27th December 1928 and is making good progress. It is intended to deepen the channel to a minimum depth of 32 feet and to provide an additional oil berth which will enable all ships calling for oil bunkers to be accommodated at all times.

The financial position of the Port continued to be satisfactory. Although the value of the trade decreased by Rs. 2 crores 14 lakhs in comparison with the previous year, yet the tonnage of merchant steamers using the Port increased. The receipts were Rs. 1·61 lakhs more than in the previous year. The closing balance was Rs. 17·17 lakhs as against an opening balance of Rs. 14·70 lakhs. Both imports and exports showed decreases, the former by Rs. 1 crore 14 lakhs and the latter by nearly Rs. 1 crore.

The number of vessels including country-craft and Government vessels that entered the harbour during the year was 2,793 with an aggregate tonnage of 5,983,000 as against 2,706 with an aggregate tonnage of 5,959,700 in the previous year. Five ships with 4,792 pilgrims entered the harbour on their way from the Haj.

WORKING OF THE RENT ACTS

Bombay.—The number of original enquiries made by the Deputy Rent Controller was slightly below normal. In most of the cases both landlords and tenants requisitioned the help and advice of lawyers and civil engineers, and regular enquiries were made as in civil suits. There were also many cases in which claims were preferred for repairs, improvements, alterations and additions. In all such cases the premises were inspected by the Deputy Rent Controller and evidence was taken and recorded after such inspection.

During the year the total number of cases relating to " Small premises " in respect of which complaints were received from the tenants and cases in respect of which applications were received from landlords for certificates under Section 17 (1) of Bombay Act VII of 1918 as amended by Bombay Act XIV of 1920, was 411 against 662 in the previous year, and the total number of tenements in these cases aggregated 6,837 against 9,542 in the previous year, showing a decrease of 2,705 tenements in the year under report which was due to the Rent Acts having expired on 31st December 1928. Out of the total number of tenements dealt with, 263 tenements were held to be " Not small premises."

There were during the year two meetings of the Rent Committee as against three in the previous year. Out of 411 cases decided objections were filed in seven cases. The Deputy Rent Controller's orders were confirmed in five cases, in one case his order was modified and in one case the objection was withdrawn.

There were 337 fresh prosecutions as against 1,077 in the previous year. Including 264 prosecutions pending at the close of the previous year, the total number of prosecutions disposed of was 601.

Poona.—The number of suits under the Rent Act that came before the First Class Sub-Judge, Poona, was 32 of which nine were disposed of, six in favour of the landlords, two in favour of tenants and one suit was withdrawn.

Thana.—The Rent Act was in force in Thana Mahal of this District up to the end of December 1928. Thirteen cases were filed and disposed of and no appeal was preferred against the decision of the Rent Controller.

Eight months have elapsed since the abolition of the Act but no serious complaints about excessive rents have been reported nor has there been any public agitation to secure the extension of the Act.

Bombay Suburban District.—Forty-nine applications were received for fixing the standard rents of premises as against 78 in the previous year. Of these 11 were not in respect of small premises as defined in Section 2 (*d*) of the Rent Act and therefore were not entertained. Eight applications were filed without any action as the parties failed to appear when called and in the remaining 30 applications standard rents were fixed and certificates were granted.

Karachi.—The Rent Controller fixed and re-fixed the rent of 798 tenements comprising altogether about 200 separate buildings. Only 8 appeals as against 28 in the preceding year were preferred to the Rent Committee and out of these the Rent Controller's decisions were upheld in three cases and slightly modified in the remaining five cases.

Aden.—During the year 1928-29 the Rent Controller dealt with 283 applications and fixed the standard rent of 302 small premises. On the 31st December 1928 the Rent Acts were abolished and the operations thereunder ceased to exist.

CHAPTER X

COLLECTION OF REVENUE AND FINANCIAL REVIEW

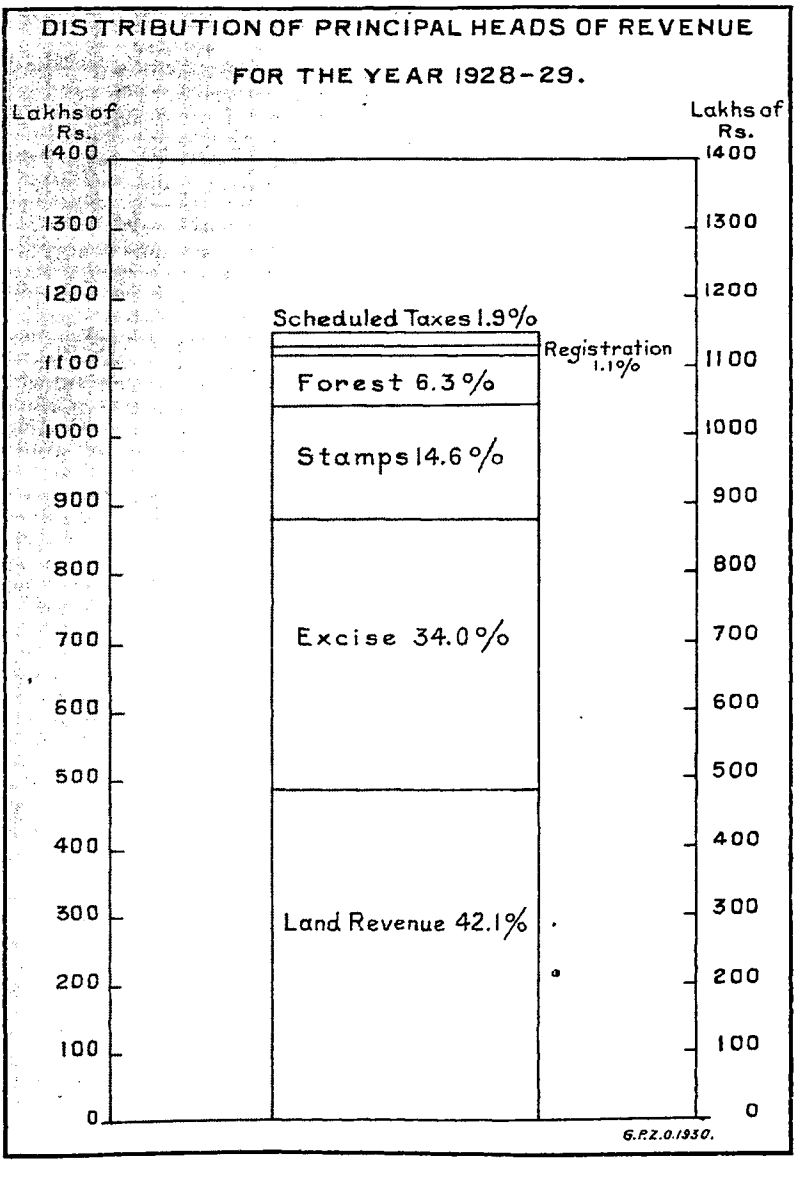
THE Revenue Administration of the Bombay Presidency is carried on by the following officers working under the orders of Government :—

Five Commissioners, 27 Collectors, one Deputy Commissioner and a number of Assistant Collectors. All these officers, with the exception of four who belong to the Bombay (Provincial) Civil Service, are members of the Covenanted Civil Service. In addition to the officers mentioned above, there are 88 Deputy Collectors. They are divided into three grades and are generally in charge of district treasuries or of divisions of districts, or in Sind are Daftardars to the Collectors.

A Collectorate generally contains ten talukas, each of which comprises about one hundred Government villages, that is, villages that are not alienated and the total revenues of which belong to the State. Each village has its regular complement of officers, a large number of whom are hereditary. The officers on whose services Government in the Presidency proper is mainly dependent are the patil, who is the head of the village for both revenue and police purposes; the talati or kulkarni, who is the clerk and accountant; the mahar, who is a kind of beadle; and the watchman. The patil and kulkarni either hold a certain quantity of rent-free land or are remunerated by a cash payment equivalent to a certain percentage on the collections.

The mahar and watchman, in common with other village servants, also hold land on more or less favourable terms as regards assessment, and receive in addition grain and other payments in kind from the villagers. The remaining servants are the carpenter, blacksmith, potter, barber, and others whose services are necessary to the community. A village is for Government or social purposes complete in itself, so its revenue accounts are simple but complete. They are based on the Record of Rights. Every plot of land held by an occupant is separately measured, assessed and entered in the Record in the name of the person or persons in actual possession of it. The land revenue demand is based on this Record which is thus both a Record of Rights as well as of liability.

In charge of each taluka of a collectorate there is an officer termed MAMLATDAR (or MUKHTIARKAR in Sind).


DISTRIBUTION OF PRINCIPAL HEADS OF REVENUE
FOR THE YEAR 1928-29.
Lakhs of Rs.
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
Scheduled Taxes 1.9%
Registration 1.1%
Forest 6.3%
Stamps 14.6%
Excise 34.0%
Land Revenue 42.1%
G.P.Z.O.1930.

AN ASSISTANT or DEPUTY COLLECTOR is placed in revenue charge of a division which contains on an average four talukas.

THE COLLECTOR AND DISTRICT MAGISTRATE is in charge of the whole district. Besides superintending the realisation of the land revenue, the duties of administering the collection of excise and other special taxes and of supervising the stamp revenue devolve upon the Collector as executive head of the district.

THE REVENUE COMMISSIONERS, of whom there are four for the Presidency proper and one in Sind, exercise a general superintendence and control over the revenue administration of the districts in their charge.

The annual BUDGET is presented to the Council during February. Previous to presentation it is examined by the Finance Committee of the Council. This committee, which consists at present of 12 elected members, 4 nominated members, the Members of the Executive Council and Ministers, and the Secretary to Government, Finance Department, is not statutory but is constituted annually by motion made in the Council. The elected members are elected by the Council immediately after motion is carried and its functions are advisory only.

The Budget is divided into voted and non-voted items. All items under the following heads are, under section 72-D (3) of the Government of India Act, non-voted:—

(i) contributions payable by the local Government to the Governor-General in Council;

(ii) interest and sinking fund charges on loans;

(iii) expenditure of which the amount is prescribed by or under any law;

(iv) salaries and pensions payable to or to the dependants of—

(*a*) persons appointed by or with the approval of His Majesty or by the Secretary of State in Council;

(*b*) judges of the High Court of the province;

(*c*) the advocate-general;

(*d*) persons appointed before the first day of April, nineteen hundred and twenty-four, by the Governor-General in Council or by a local Government to services or posts classified by rules under this Act as superior services or posts; and

(v) sums payable to any person who is or has been in the civil service of the Crown in India under any order of the Secretary of State in Council, of the Governor-General in Council, or of a Governor, made upon an appeal made to him in pursuance of rules made under this Act.

For the purposes of this sub-section the expression " salaries and pensions " includes remuneration, allowances, gratuities, any contributions (whether by way of interest or otherwise) out of the revenues of India to any provident fund or family pension fund, and any other payments or emoluments payable to or on account of a person in respect of his office.

All other items are voted. But if the Governor certifies that any demand relating to a reserved subject, which has been either reduced or refused by vote of the Council, is essential to the discharge of his responsibility for that subject, the reduction or refusal of the Council becomes void.

By Rule 33 of the Rules of the Legislative Council a Committee on Public Accounts is constituted to deal with the audit and appropriation accounts of the province. The committee consists of 12 members of whom 8 are elected by the non-official members of the Council, and the remainder nominated. The Finance Member is *ex-officio* Chairman.

THE BUDGET FOR 1928-29

The land revenue realised during the year under review amounted to Rs. 484½ lakhs—a fall of 38½ lakhs as compared with the receipts of Rs. 523 lakhs during 1927-28, due partly to an increase in the amount credited to the Irrigation Department and partly to the destruction of crops by frost in several parts of the Presidency.

The increases in stamps duties provided by the Indian Stamp (Bombay Amendment) Act of 1922, as amended by Bombay Act II of 1927, were sanctioned only up to the end of March 1928, but Government considered it necessary to approach the Legislative Council for their continuance indefinitely, in view of the continued financial stringency. The Legislative Council however sanctioned (by Bombay Act I of 1928) their continuance for a further period of one year only. A revenue of about Rs. 15 lakhs is dependent upon the future continuance of this measure. The Legislative Council similarly sanctioned, for one year only, the enhancement of court fees in certain cases provided by the Court-fees (Bombay Amendment) Act of 1926. A revenue of about Rs. 6 lakhs is dependent on the continuance of this measure.

In the next important head of revenue, *viz.*, Excise, there was also a drop. The actuals for the year were Rs. 392¼ lakhs—a decrease of 4 lakhs—as compared with Rs. 396¼ lakhs realised during 1927-28, and of 17¼ lakhs as compared

with the Rs. 409½ lakhs realised in 1926-27. Since 1920-21 the consumption of liquor has fallen from 28·4 lakhs of proof gallons to 18·4 lakhs in 1923-24, 17·2 lakhs in 1924-25, 15·4 lakhs in 1925-26, 14·2 lakhs in 1926-27, 13·9 lakhs in 1927-28 and 13·6 lakhs in the year under report.

Under "Stamps" the actual receipts during 1928-29 were Rs. 168½ lakhs—a reduction of Rs. 7 lakhs as compared with the previous year, but an improvement of Rs. 1 lakh as compared with the revenue during 1926-27.

Forest revenue for the year under review was Rs. 73½ lakhs as compared with a revenue of Rs. 73 lakhs in 1927-28, and Rs 76½ lakhs in 1926-27.

Under "Registration" the actuals were Rs. 11¾ lakhs. The revenue under that head has been very steady during the last three years.

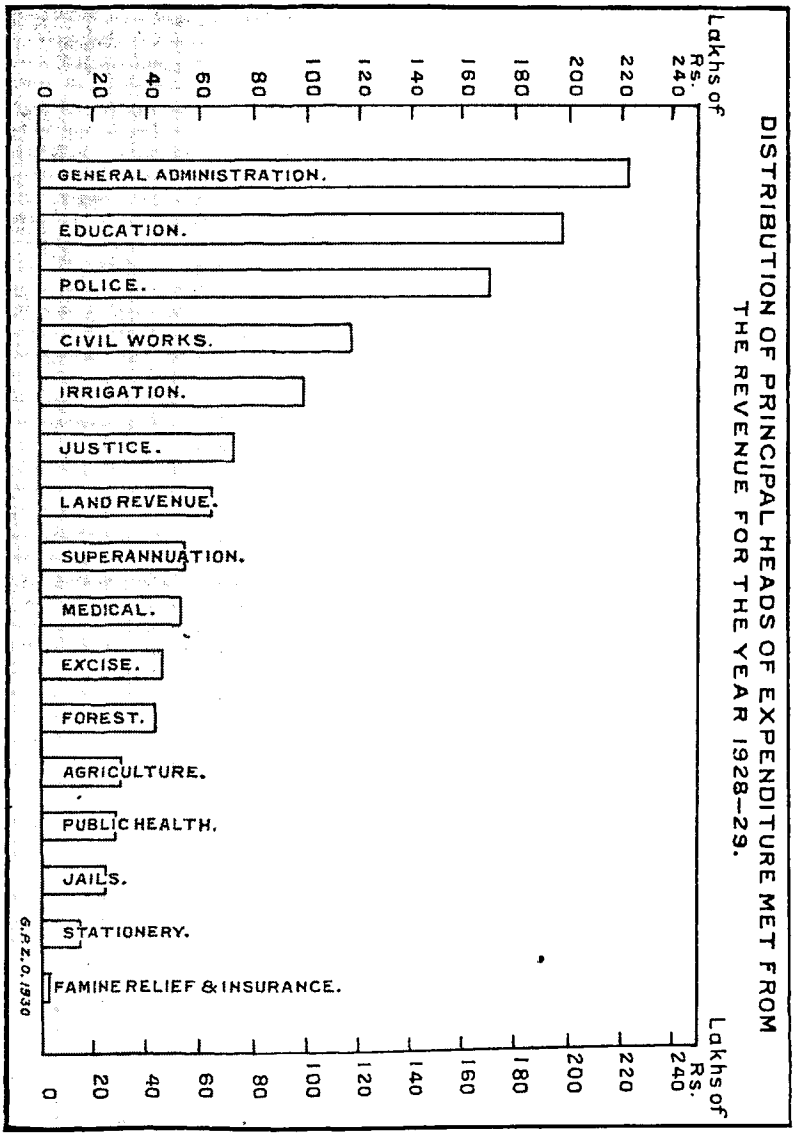
Under "Scheduled Taxes" the revenue in the year under review was Rs. 21½ lakhs, an improvement of a quarter of a lakh as compared with 1927-28 and of two lakhs as compared with 1926-27.

The income tax revenue in the Bombay Presidency during the year under review amounted only to Rs. 317½ lakhs, due to the continuance of the general depression in trade and the unfavourable condition of the mill industry. The Government of Bombay however received nothing from this taxation as the assessed income of that year fell below the assessed income of 1920-21 (a boom year) which is fixed as the datum line. It is only when the assessed income of any year exceeds that datum line that the Government of Bombay is entitled to a small share of it.

The receipts under "Police," "Medical," "Public Health" and "Civil Works" were nominally larger as compared with those of the previous years, but this was mainly due to the revised classification rules, under which recoveries of expenditure from other Governments or public bodies, which were formerly deducted directly from expenditure are, from the year under report, shown as receipts. The figures on the expenditure side are correspondingly increased.

Under "Civil Works" the receipts were Rs. 20½ lakhs, an increase of about 3½ lakhs over the previous year's figure, partly due to larger receipts under rents of buildings, road tolls, etc., and partly due to the revised classification referred to above.

The expenditure under "Education" during the year under review was Rs. 198 lakhs as compared with Rs. 202


DISTRIBUTION OF PRINCIPAL HEADS OF EXPENDITURE MET FROM THE REVENUE FOR THE YEAR 1928-29.
Lakhs of Rs.
0
20
40
60
80
100
120
140
160
180
200
220
240
GENERAL ADMINISTRATION.
EDUCATION.
POLICE.
CIVIL WORKS.
IRRIGATION.
JUSTICE.
LAND REVENUE.
SUPERANNUATION.
MEDICAL.
EXCISE.
FOREST.
AGRICULTURE.
PUBLIC HEALTH.
JAILS.
STATIONERY.
FAMINE RELIEF & INSURANCE.
G.P.Z.O.1930

lakhs in the previous year. The drop in expenditure was mainly due to smaller payments on account of grants to local bodies and less expenditure under Inspection on account of the transfer of staff to local bodies.

The expenditure recorded under "Famine Relief" was Rs. 1½ lakhs during the year under report compared with Rs. 15 lakhs during 1927-28 and Rs. 11¼ lakhs in 1926-27. Owing to a change of classification introduced with effect from 1928-29 only direct expenditure on the relief of famine was debited to that head during that year, while in the previous years expenditure on schemes for the prevention of famine, *e.g.*, fodder storage, boring operations for water supply in precarious tracts, etc., was also debited to that head. The expenditure in the year under review was incurred on relief measures in those areas of Gujarat and Sind which were afflicted with heavy floods during July-August 1927.

In the year under review Rs. 417·34 lakhs were borrowed from the Government of India, of which amount Rs. 271·87 lakhs were meant for the Lloyd Barrage and Rs. 24·35 for other irrigation works, productive and unproductive. Rs. 10·55 lakhs were borrowed for other productive purposes and Rs. 35·36 lakhs for unproductive purposes, mainly civil works. An amount of Rs. 75·21 lakhs was taken for the Development Department of which Rs. 72·29 lakhs were for expenditure on works and the balance for advances to the public and housing societies under the State-aided building scheme.

The standard rate of interest was 5 per cent. on all loans taken in 1928-29 for productive purposes. The rate charged on unproductive loans in that year was higher by ¼ per cent.

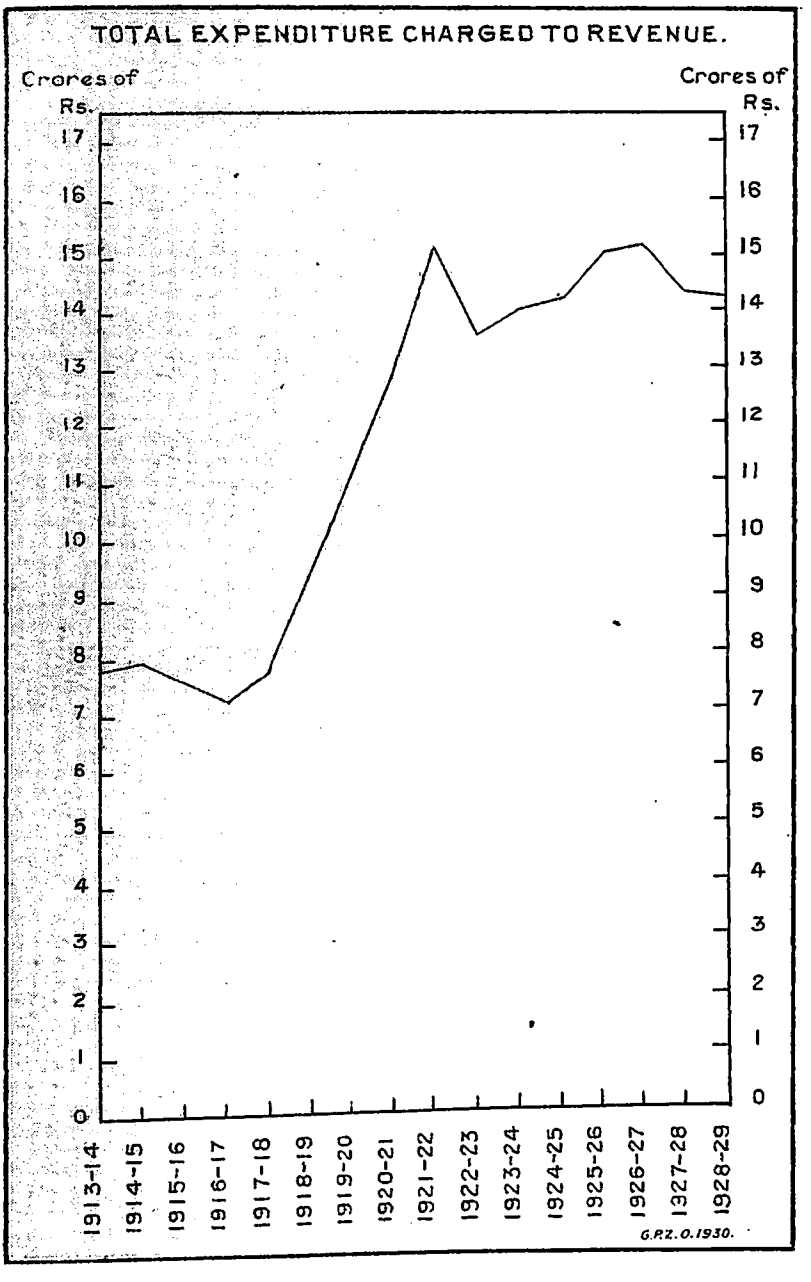
REVENUE AND EXPENDITURE

The principal items of revenue and expenditure for the year 1928-29 are given below :—

(Figures in thousands of rupees)

Head of Account	Revenue	Expenditure
	Rs.	Rs.
Land Revenue	4,84,67	64,78
Excise	3,92,26	46,32
Stamps	1,68,40	2,68
Forest	73,43	43,58
Registration	11,75	6,55
Scheduled Taxes	21,52	20
Irrigation	65,72	98,86*

* This includes (*a*) an expenditure of 10,00 from ordinary revenue on account of interest on the capital expended on the Lloyd Barrage Scheme and (*b*) an expenditure of 9,81 on account of protective irrigation works met from the excess balance in the Famine Fund.


TOTAL EXPENDITURE CHARGED TO REVENUE.
Crores of Rs.
Crores of Rs.
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
1913-14
1914-15
1915-16
1916-17
1917-18
1918-19
1919-20
1920-21
1921-22
1922-23
1923-24
1924-25
1925-26
1926-27
1927-28
1928-29
G.P.Z. O. 1930.

BOMBAY, 1928-29

(Figures in thousands of rupees)

Head of Account	Revenue	Expenditure
	Rs.	Rs.
Interest	1,51,52	2,05,37
Sinking Funds	..	11,79
Administration of Justice	15,52	72,92
Jails and Convict Settlements ..	5,41	23,69
Police	11,10	1,69,70
Education	11,86	1,97,83
Medical	13,74	53,30
Public Health	13,90	28,49
Agriculture	3,49	29,53
Industries	6	79
Miscellaneous Departments ..	1,83	4,50
Civil Works	20,51	1,17,25
Bombay Development Scheme (Revenue Account)	18,00	28,71
Superannuation Allowances and Pensions	15,34	54,33
Stationery and Printing	4,37	14,82
Miscellaneous	2,74	9,94
Miscellaneous Adjustments between the Central and Provincial Governments.	— 4,50	..
Extraordinary Receipts	1,96	..
General Administration	..	2,23,41
Ports and Pilotage	..	21
Scientific Departments	..	84
Famine Relief and Insurance ..	..	1,57

LAND REVENUE

——	Demand	Collection	Suspensions	Remissions
	lakhs.	lakhs.	lakhs.	lakhs.
Northern Division ..	126·95	94·64	20·08	8·46
Central Division ..	184·15	178·87	4·61	·65
Southern Division ..	123·95	118·69	4·63	·60
Sind ..	114·27	114·09	1·37	5·79
Bombay Suburban Division ..	2·86	2·15	....	....

PUBLIC WORKS REVENUE

The Public Works Department revenue falls under the heads noted below :—

(1) XXX Civil Works, Central.
(2) XXX Civil Works, Provincial.
(3) XXXVIII Military Engineer Services.

The revenue under (1) and (2) above which consists of rents of buildings, rents of electric installation, rents of water supply and sanitary installations, ferry receipts, tolls on roads, etc., amounted to Rs. 72,000 and Rs. 20½ lakhs, respectively, as against Rs. 75,000 and Rs. 16¾ lakhs derived during the previous year.

The revenue under (3) which consists of payments for water supply and miscellaneous amounted to Rs. 65,000 as against Rs. 50,000 derived during the previous year.

CUSTOMS ADMINISTRATION

PORT OF BOMBAY

The gross receipts credited to Customs at the Bombay Custom House, excluding the tea and cotton cesses, amounted to Rs. 12 crores and 57 lakhs during the year under report as compared with Rs. 12 crores and 48 lakhs during the previous year. Refunds and drawbacks granted during the year amounted to Rs. 22·46 lakhs. The total expenditure during the year was Rs. 18·83 lakhs as against Rs. 18·02 lakhs in the preceding year.

Customs Offences.—The total number of cases adjudicated under the Sea Customs Act was 3,350 as against 2,680 in the preceding year. Out of the total number, 1,655 related to offences in respect of the Merchandise Marks Act. Recoveries under fines and penalties in lieu of confiscation in cases under the Merchandise Marks Act amounted to Rs. 7,785 and Rs. 1,227, respectively. In other cases penalties aggregating Rs. 55,978 were imposed. The Preventive Department seized 50 ounces and 155½ grains of cocaine during the year. The seizure of 50 ounces was effected in conjunction with the Excise Department. The seizures of opium and other dangerous drugs numbered 22. Of these 13 were made by the Preventive Department and the rest by the Postal Appraisement Branch of the Custom House. The Preventive Department also placed before the magistracy 13 cases of illicit importation of arms and ammunition and obtained convictions in all of them.

In four other cases the arms and ammunition were confiscated. The cases of importation of arms and ammunition through the prohibited medium of the Post numbered 43. Seven consignments were taken over on behalf of Government under section 32 of the Sea Customs Act. In each case sums higher than that declared by importers in their bills of entry were realised and a profit amounting to Rs. 3,447 was made.

LAND CUSTOMS

Portuguese Frontiers.—The receipts at all the Land Customs Stations during the year under report amounted to Rs. 10·53 lakhs against Rs. 14·12 lakhs during the previous year or a decrease of Rs. 3·59 lakhs on account of less imports at Castle-Rock of Railway materials by the M. & S. M. Railway Company and of dutiable kerosine oil.

The concession of granting refund of excise on Burma oil and on indigenous petrol consumed in Goa territory was sanctioned during the year under report. This necessitated the refund of Rs. 11,239 and Rs. 16,145, respectively.

The dutiable import traffic showed a decrease both on the Goa and Daman Frontiers during the year under review ; while dutiable export traffic on the Goa Frontier showed an increase and that on the Daman Frontier showed a small decrease.

In regard to non-dutiable through traffic at Castle-Rock, the Up traffic to Goa showed a considerable increase owing to large movements of manganese and groundnuts. On the other hand, the Down free traffic from Goa showed some reduction largely owing to a fall in the import of free Railway material and power-driven machinery.

Viramgam Frontier.—The Viramgam Customs Line worked smoothly throughout the year. The number of Land Customs stations, *viz.* 11, remained unchanged during the year. The Customs examination on the Viramgam Line continued to be restricted to goods arriving from Kathiawar, the passengers being exempted from any regular search. Therefore there were no complaints from the travelling public.

The net receipts at the Land Customs stations on the Line during 1928-29 amounted to Rs. 73·94 lakhs as against Rs. 40·21 lakhs during the previous year for nine months.

Sugar formed the bulk of the import trade and the amount of duty collected thereon during the year amounted to Rs. 65 lakhs.

The principal ports from which dutiable goods were imported on the Viramgam Customs Line were Bedi Bandar (Navanagar State), Port Okha (Baroda State), Veraval (Junagadh), and Porbandar. Imports from Bedi Bandar mainly consisted of sugar. Nearly 83 per cent. of the total dutiable import traffic passing through Viramgam during the year under report came from Bedi Bandar and Jamnagar and of this, sugar alone represented 82 per cent. and other goods like paper, etc., only 1 per cent. Imports from Okha ranked next in value and in the amount of duty recovered. The imports consisted of miscellaneous articles, particularly motor cars and trucks, bicycles, machinery, chemicals, dry and wet dates, iron and steel materials, toilet requisites, paper, sugar, motor and bicycle tyres and tubes, musical instruments and parts thereof, soap, medicines, etc. Nearly 15 per cent. of the total import traffic came from Port Okha of which sugar represented 6 per cent. and other goods 9 per cent.

The value of dutiable goods dealt with at Viramgam during the year under report amounted to Rs. 212½ lakhs as against Rs. 125 lakhs during the nine months of the previous year; while the value of free goods, agricultural produce and goods manufactured in Kathiawar, amounted to Rs. 277 lakhs as compared with Rs. 125 lakhs for the same period of 1927-28.

SIND

The gross collections on account of Customs revenue during the year 1928-29 amounted to Rs. 630 lakhs as against Rs. 573 lakhs during the year 1927-28. The total amount of refunds and drawbacks granted during the year as finally adjusted by the Accountant-General, Bombay, was Rs. 33·43 lakhs as against Rs. 34 lakhs in the previous year. The expenditure was Rs. 7·54 lakhs as compared with Rs. 7·80 lakhs in 1927-28. The number of offences adjudicated under the Sea Customs and allied Acts rose from 821 in the previous year to 1,183 during the year under report. The Preventive Department was responsible for detecting 4 cases of illegal importations of arms and ammunition and 12 cases of clandestine importations of dangerous drugs. The accused in these cases were suitably dealt with. There were also a number of importations of obscenities during the year : these were suitably dealt with.

There were 1,796 cases of infringement of the provisions of the Indian Merchandise Marks Act as against 1,508 instances in the preceding year.

SALT DEPARTMENT

BOMBAY PRESIDENCY PROPER

The salt with which the Bombay Salt Department has to deal may conveniently be classified as follows :—

(1) *Baragra or Rann salt* made from brine wells on the edge of the Lesser Rann of Cutch in the salt-works at—

(*a*) Kharaghoda and Udu situated close to each other and jointly named the Pritchard salt-works, which are Government property and worked departmentally.

(*b*) Kuda in the Dhrangadhra State.

(2) *Sea salt made within the Presidency.*—The factories at Dharasna and Chharwada at the southern end of the Gujarat coast near Bulsar are both Government property and worked departmentally. The other salt works with three exceptions are grouped within a radius of 30 miles of Bombay city. Those which are Government property are leased to private individuals for working ; the others are owned as well as worked privately.

(3) Imported salt, mostly from sea-salt-works in Goa territory.

There was an increase of over 3 lakhs of rupees in the revenue of the Department during the year, the gross receipts being Rs.151 lakhs. The total expenditure excluding refunds amounted to Rs. 30·68 lakhs against 29·37 lakhs during the previous year.

The production of salt at Kharaghoda was increased during the year as stocks were diminishing. The production was 27·55 lakhs this season as against 20·30 lakhs of maunds during the previous season.

The sales of Baragra salt during the financial year amounted to 26·17 lakhs of maunds compared with 24·29 lakhs. The increase was due to ordinary trade fluctuations. The quantity of Baragra salt at Kharaghoda at the close of the manufacturing season was 37·57 lakhs of maunds against 33·64 lakhs on the corresponding date last year, while that at Kuda was 11·71 lakhs of maunds compared with 16·86 lakhs of maunds at the close of the manufacturing season of 1927-28.

The produce of the sea salt works was 109·77 lakhs of maunds during the seasonal year 1928-29 as against 99·22 lakhs of maunds during the previous season. The total sales of sea salt during the financial year under review amounted to 98·94 lakhs of maunds against 97·19 lakhs during the previous year. The manufacturing season closed with a balance of 53·78 lakhs of maunds of sea salt on hand against 48·84 lakhs of maunds at the end of the previous season.

The total quantity of salt issued and imported for consumption in the Presidency proper is shown in the sub-joined table :—

Name of Province	Year	Quantity	Population	Average per head
		Mds		lbs.
Gujarat	1927-28 ..	1,203,366	6,840,085	14·48
	1928-29 ..	1,217,045		14·64
Konkan, Deccan and Southern Maratha Country.	1927-28 ..	2,561,836	15,479,188	13·62
	1928-29 ..	2,720,997		14·46
Total ..	1927-28 ..	3,765,202	22,319,273	13·88
	1928-29 ..	3,938,042		14·52

The per capita issues for consumption in the Presidency proper have slightly increased.

The number of fish-curing yards at which business was transacted during the year under review remained unchanged at 33. The total quantity of fish brought to be cured was 308,946 maunds against 284,268 maunds or an increase of 24,678 maunds owing to a favourable fishing season.

2,629 maunds of denatured salt for manurial purposes against 2,767 maunds during the previous year were issued free of duty at the rate of 13 annas per maund up to the 31st August 1928 and at 10 annas from 1st September 1928 from convenient Custom Houses, salt-works and fish-curing yards.

The quantity of salt issued free of duty to mills, tanneries and chemical works amounted to 64,069 against 92,504 maunds during the previous year. The decrease was due to the prolonged mill strikes in Bombay.

SIND

The following were the sources of salt supply during the year :—

(1) The Government Salt Works, Maurypur,
(2) The Grax Limited Salt Works,
(3) The Star Salt Works,
(4) The Laxmi Salt Works,
(5) The Darwari Salt Deposit,
(6) The Saran Salt Deposit.

Salt was issued from the Government Salt Works, Maurypur, through the agency of a Transport Contractor while at Darwari and Saran it was issued direct to the merchants.

There was an increase of 254,400 maunds in output and 1,700 maunds in issues. The former was mostly confined to sea-salt and was due to production of salt on a large scale in private salt works for export to Calcutta, while the latter was due to conditions reverting to normal in the desert after the exceptional rainfall of the preceding two years.

Imports of salt from the Punjab rose by 24,000 maunds. Imports by sea were 1,900 maunds as against 5,000 maunds in the preceding year. The salt produced at the private salt works in Sind is said to have replaced the imported salt.

During the year under report 192,842 maunds of salt were manufactured at the Government Salt Works at Maurypur as against 278,441 maunds during the preceding year, while at the Saran and the Darwari Salt Deposits 51,815 and 15,400 maunds of salt were excavated during the year as against 25,000 and 15,091 maunds, respectively, during the previous year. The output of salt at the Grax, Star and Laxmi Salt Works amounted to 180,006, 231,374 and 169,403 maunds as against 119,604, 141,344 and 6,967 maunds, respectively, during the previous year.

The decrease in production at the Government Salt Works at Maurypur was due to the curtailment of manufacture, owing to the private salt works having taken over the trade in Sind and its subsequent entire suspension in the month of March 1929.

Double the quantity of salt was excavated at Saran Salt Deposit as the stock had fallen owing to the Deposit having remained under water during 1926-27.

Of the total quantity of salt produced locally and imported by private agency 516,920 maunds were consumed in Sind during the year as compared with 493,717 maunds in the preceding year. The average consumption worked out at 12·97 lbs. per head per annum as against 12·39 lbs. in the previous year.

The average wholesale and retail prices of salt in the Province compare as under with those of the preceding year:—

Year	Wholesale price		Retail price	
	Maurypur	Punjab	Maurypur	Punjab
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1927-28	2 9 3	3 9 0	2 15 4	3 14 6
1928-29	2 7 5	3 2 8	2 13 10	3 7 11

The number of offences against the salt laws detected during the year was 110 as against 92 during the previous year.

The gross receipts from excise duty and other charges on salt amounted to Rs. 6·63 lakhs and the expenditure (share debitable to salt) was Rs. 1·34 lakhs.

ADEN

The following were the salt-works in operation during the year :—

(1) Italian Salt-works,
(2) A. and J. Laljee's Salt-works,
(3) Hajibhoy Laljee's Salt-works,
(4) Little Aden Salt-works, and
(5) Arab Salt-works.

The total revenue and expenditure for the year amounted to Rs. 75,363 and Rs. 2,738, respectively, as against Rs. 54,143 and Rs. 2,738 in the preceding year.

The quantity of salt removed from the Arab Salt-works was 60,738 maunds, of which 21,476 maunds were retained for local consumption and 39,262 maunds were exported to the interior of Arabia.

The total quantity of salt exported from the other salt works during the year was 209,100 tons to the Indian Ports and 2,407 tons to the non-Indian Ports.

Nine cases under the Salt Act were detected during the year as against nil in 1927-28.

EXCISE

BOMBAY PRESIDENCY PROPER

The rationing system was continued during the year 1928-29, the rations for all districts being fixed at the same figures as for 1927-28 except in the case of the West Khandesh, East Khandesh, Surat and Thana districts. The policy of discouraging the consumption of stronger spirit by restricting a certain number of shops in each District to the exclusive sale of weak spirit was continued in places where such a policy had proved successful. But in certain areas where it was found that such a restriction had only driven people to stronger spirit illicitly distilled or imported, it was found necessary to remove the restriction and allow the sale of stronger spirit at the shops.

The foreign liquor revenue showed a decrease of Rs. 1·82 lakhs owing to the system of receiving license fees in arrears. The following table gives the statistics of sales of foreign liquor

in the year under report compared with those in the previous year :—

Year	Fermented Liquors (Bulk Gallons)	Wines (Bulk Gallons)	Potable Spirits (Bulk Gallons)	Denatured Spirits (Bulk Gallons)
1927-28	628,471	35,268	248,627	215,598
1928-29	873,991	41,911	290,480	235,741
	+ 245,520	+ 6,643	+ 41,853	20,143

The increase in the consumption of fermented liquors, wines and potable spirits was due to the fact that during the year under report, the statistics of sale were correctly recorded in accordance with the new scheme introduced by Government, while in previous years the figures of sales were by no means reliable. Had the old system of accounts continued during the year under report, the figures of consumption would probably have been lower than the figures of 1927-28, as a matter of fact there was a considerable decline in the consumption of foreign liquor on account of the prolonged mill strike in Bombay, the general trade depression and the closure of the shops in Bombay during the communal riots in February. The increase in the sales of fermented liquors was attributed in part to the growing taste for beer among the working classes, in preference to stronger beverages.

Opium produced the windfall of the year. The sale proceeds (including duty) on opium were Rs. 12·63 lakhs during the year under report as against Rs. 12·39 lakhs in 1927-28, an increase of Rs. 24,000. The auction fees amounted to Rs. 11·21 lakhs against Rs. 9·84 lakhs in 1927-28, an increase Rs. 1·37 lakhs. The consumption of opium, however, fell by 1,026 seers due to smuggling and to high selling prices ; it amounted to 22,126 seers as against 23,152 seers in 1927-28.

The situation as regards country spirit was bad. There was a decrease of Rs. 8·12 lakhs in still head duty and a decrease of Rs. 2·10 lakhs in vend fees. Added to this fall in revenue, there was an increase in crime in general and especially in cases relating to illicit distillation, illicit importation and unlicensed sale. Illicit liquor is being consumed in large quantities all over the Presidency and the record of cases would have been much higher if there were a larger staff to cope with the evil. Several serious assaults were committed on excise raiding

parties and in some districts popular opposition to the detection of illicit stills was so great that Excise Officers hestitated to act on information until they could collect a large party of Excise and Police peons, which means loss of time and failure or abandonment of raids.

" Consumption is nearly 5 lakhs below the allotted ration and the problem before the Department is how to use this quota in order to replace illicit consumption," remarks the Commissioner of Excise in his Annual Report. " High prices prevail in almost every district and these must be brought under control as a first step towards the suppression of illicit distillation. Steps have been taken to make country spirit more palatable so as to compete with illicit liquor, but so long as the high price of country liquor makes it impossible for a man to get a drink at a reasonable cost, so long will illicit distillation go on gathering force, inflicting an entirely unjustifiable loss in Government revenue without in the least helping the cause of temperance ; in fact the opposite effect is produced, as illicit liquor is potent and costs practically nothing. The passing of the Mahura Act will strengthen the hands of the Department to a certain extent but the long vacations allowed by the Act may in some measure defeat the object in view."

Toddy revenue decreased by Rs. 1·89 lakhs. The total sales showed a decrease of 1,196,898 gallons which was mainly shared by the Surat and Thana districts and was due to the anti-drink movement started in the Surat District. There was also a decrease in the Town and Island of Bombay on account of the prolonged mill strike and the exodus of millhands to their villages.

The revenue from intoxicating drugs also suffered to the extent of Rs. 1·22 lakhs by a decline both in duty receipts and vend fees.

The expenditure for the year exclusive of (1) refunds (Rs. 1,79,500), and (2) compensation to (*a*) the Bombay Municipality for loss of revenue which it previously derived from shop licenses (Rs. 1,43,700), and (*b*) the District Local Boards in the Presidency in lieu of one anna cess on excise revenue which they were formerly allowed (Rs. 1,55,000) was Rs. 26,41,000 against Rs. 31,51,700 in the previous year. The net excise revenue of the year decreased by Rs. 5·66 lakhs, *i.e.*, from Rs. 312·57 lakhs in the previous year to Rs. 306·91 lakhs in the year under report.

SIND

The consumption of country spirit rose from 114,000 to 119,000 proof gallons. The increase was shared by all the

districts excepting Hyderabad, and was attributed to the absence of combination for ten months among the licensees at Karachi, influx of labour from other places for the Barrage works in Sukkur and Thar Parkar Districts and decrease in the sale of illicit liquor in the Larkana District owing to greater vigilance of the Excise Officers. The decrease in the Hyderabad District was due partly to closure of two shops and partly to the poor condition of the people after the rains and floods of 1927.

There was an increase of 61,000 gallons in the imports by sea of fermented liquors, liqueurs and spirits—potable and non-potable—but a decrease of 2,000 gallons in wines. The increase took the form of larger imports of bulk beer from the United Kingdom, bottled beer as well as brandy and whisky from Germany and rectified spirit from Java, the latter being denatured at the Karachi Customs House for export to other provinces.

Consumption in the province fell by 4,000 gallons in the case of potable spirits and rose by 12,000 gallons in the case of fermented liquors, owing to a larger demand for the cheaper and lighter continental beer and consequent decline in imported spirits. This seems to be a satisfactory feature of the situation.

The consumption of toddy fell from 19,700 gallons in the previous year to 17,000 gallons during the year under report. The decrease was ascribed to the lower selling price of country spirit as compared to the previous year.

The net revenue amounted to Rs. 41,02,000 showing an increase of Rs. 62,000.

There was a decline in the number of crimes detected which was partly due to less smuggling of Kelat liquor and bhang on account of deterrent punishments awarded to a gang of smugglers. The total number of offences detected was 477 as against 602 in the previous year.

STAMPS

The revenue realised from the sale of judicial and non-judicial stamps in the year 1928-29, both in the Presidency proper and Sind, amounted to Rs. 171·29 lakhs as against Rs. 178·43 lakhs, of which Rs. 87·76 lakhs were received under the Stamp Act and Rs. 83·53 lakhs under the Court Fees Act. The revenue realised in Bombay City was Rs. 25·77 lakhs out of the total collections of Rs. 74·45 lakhs under the Court Fees Act in the Presidency proper. The abnormal decrease in the revenue under General (Non-judicial) stamps for this year, *viz.* of Rs. 7 lakhs, is due to the decrease in the receipts on

account of composition of stamp duty and to the decrease under other sub-heads on account of depression of trade.

Out of the revenue of Rs. 2,58,000 derived from duties and penalties levied on insufficiently stamped or unstamped instruments, Rs. 1,90,300 were received in Bombay City alone.

There were 537 prosecutions under the Stamp Act during the year as against eleven in the previous year. In Bombay City alone, 1,593 policies were seized and a series of 531 cases of three policies each was made out. In 5 cases a total fine of Rs. 998 was imposed by the Chief Presidency Magistrate. The remaining 526 cases were compounded by the Chief Controlling Revenue Authority under section 70 (2) of the Indian Stamp Act of 1899, on payment of a total penalty of Rs. 2,235.

TAXES ON INCOME

"The assessments made in the year 1928-29 reflected the state of affairs in the preceding year 1927-28 which is reported to be slightly better than 1926-27 which was the worst in a cycle of six bad years," remarks the Commissioner of Income Tax. "There was, of course, no permanent improvement in the persistent depression in trade and industry, but on account of low cotton prices, the Cotton Spinning and Weaving Mills worked profitably for a time and so other dependent industries and trades too had a little better time." The total amount of income-tax and super-tax collected during the year from this source was Rs. 24 lakhs as against Rs. 17 lakhs for each of the preceding two years.

As regards business in general, dealers in cloth and piece-goods had a better year and the motor car business continued to thrive with higher profits. Cement prices went up sharply and this gave a welcome relief to Cement Companies which had had losses in the past. The salt business too had a good time but the heavy fluctuations in cotton meant losses to many wholesale dealers and speculators in this commodity. Match factories had also a less profitable year on account of severe competition and the consequent fall in prices. Cotton ginning and pressing factories had, on the whole, a better time, though wherever they worked in competition there were losses. As regards professions, the legal profession showed a slight decrease in its princely earnings of former years, whereas the Accountancy profession had a better year. Banking companies showed reduced profits, but Insurance business had a distinctly better time. Railway Companies too showed increased profits.

On the whole, the year 1927-28 may be said to have given a welcome, though short, relief from prolonged stagnation to many a trade and industry in this Presidency.

The total net collections from income-tax amounted to Rs. 2 crores 50·96 lakhs as against Rs. 2 crores 44·78 lakhs for the previous year. The total number of assessees was 71,112 of whom 18,794 were persons earning the lowest assessable grade of income of Rs. 2,000 to Rs. 2,499 per annum. The next largest number, 11,659, were persons with incomes of between Rs. 3,500 to Rs. 4,999. About 10,000 persons are classed in the next higher group, that is, incomes between Rs. 5,000 and Rs. 7,499. The total income assessed to tax was Rs. 51 crores 67 lakhs which gives an average of Rs. 7,266·79 per assessee. The largest number of assessees for income-tax was in Bombay City, over 38,000 out of the 71,000 being assessed in the capital of the Presidency. Ahmedabad ranks next with 4,683 persons, Karachi comes third, while Sholapur had only 1,214 persons earning assessable incomes, as compared with 2,873 in Poona and 2,178 in Surat. The income from salaries assessed to tax was Rs. 12 crores and 66 lakhs and the net revenue collected about Rs. 48 lakhs.

Persons with incomes of Rs. 50,000 and over numbered 715 paying Rs. 36·97 lakhs income-tax on an assessed income of Rs. 3 crores 95 lakhs.

The total net super-tax collections were Rs. 67·28 lakhs against Rs. 77·90 lakhs for the preceding year, of which Rs. 58 lakhs were collected in Bombay City. Ahmedabad accounted for Rs. 5·64 lakhs, Sholapur and Karachi under one lakh each, Aden Rs. 70,000 and Surat Rs. 31,000. The total number of assessees for the whole Presidency was 847 of whom 689 were in Bombay City. There was an increase of 38 assessees over the number at the end of the previous year. It is interesting to note that though Sholapur and Karachi yielded about the same amount of super-tax there were only 5 assessees in the former as compared with 28 in the latter city.

There were five private individuals in the Bombay Presidency whose assessable incomes to super-tax amounted to more than Rs. 5 lakhs per year and they paid nearly Rs. 9 lakhs in super-tax. The number of companies paying super-tax on Rs. 5 lakhs and over was 40, the amount of tax paid by them being Rs. 31½ lakhs.

CHAPTER XI

INSTRUCTION

THE control of Public Instruction of all kinds is exercised by Government through the Director of Public Instruction, except that Government deal direct with the University on questions of Higher education. The five Divisional Inspectors are directly responsible to the Director for the general management of all Secondary and Primary schools in their Divisions. The general control of Technical and Industrial education lies with a Committee of Direction composed of officials and non-officials.

The University alone has the power of conferring degrees recognised by Government. It also provides facilities for post-graduate teaching. Affiliated to the University are the Colleges, which prepare students for the University examinations.

The Royal Institute of Science, Bombay, opened in 1920, provides facilities for post-graduate research work in Science in addition to the ordinary degree courses in Science.

Below the Colleges come the **High Schools,** usually at least one, either Government or aided, at the headquarter town of each district. These prepare students for the School Leaving Examination held by the Examination Board which has replaced both the University Matriculation and the Departmental School Final Examination, the latter of which qualifies for admission into the ower branches of the public service.

Side by side with the High Schools there are the **Middle Schools** which teach the first few standards only of the secondary school course of seven standards. There are also in some places separate high and middle schools for girls.

Below the secondary schools are a large number of **Primary Schools** both for boys and girls in which instruction is given in the vernacular to the vast mass of the people.

There are also institutions for the training of teachers for both secondary and primary schools maintained by Government, *viz.*, the Secondary Training College, Bombay, and the Vernacular Training Colleges for men and women at Ahmedabad, Poona, Dhulia (for men only), Dharwar and

Hyderabad. A certain number of district training schools have also been opened.

For technical and industrial education, there are the Sir J. J. School of Art, Bombay, and the Reay Art Workshops attached to it, the V. J. Technical Institute, Bombay, which is now recognised as the central technological institution, for the Presidency, the Workshop classes of the College of Engineering, Poona, the School of Engineering attached to the D. J. Sind College at Karachi and a number of technical and industrial schools, notably the Ranchhodlal Chhotalal Technical Institute, Ahmedabad, the Parekh School of Art, Surat, the Sir D. M. Petit Industrial School, Ahmednagar, the School of Industry at Ratnagiri and the V. J. Technical Institute, Sukkur.

For the proper selection of text-books for use in secondary and primary schools there are six special committees ; one, known as the Provincial School Book Committee, for the consideration of books for use in secondary schools, and five Vernacular School Book Committees for the consideration of books in Marathi, Gujarati, Kanarese, Sindhi and Urdu.

A Committee of Direction for Technical Education has also been constituted during the decade.

EDUCATION

[The figures in the summary relate to institutions in the British Districts only]

Bombay Presidency.—The total number of recognised and unrecognised educational institutions increased by 329 to 17,042 and the number of pupils in them by 38,687 to 1,230,840.

Out of a total of 26,831 towns and villages, 10,579 possessed schools, the average area served by each town or village with a school being 11·7 square miles. The percentage of male scholars under instruction in all kinds of institutions to the total male population was 9·69 as against 9·43 in the preceding year ; while that of female scholars under instruction to the female population was 2·71 as against 2·58.

Hindu pupils in recognised institutions numbered 926,167, Muhammadans 206,780, Indian Christians 34,680, Parsis 18,111, Europeans and Anglo-Indians 5,158. Among the rest are included 1,152 Sikhs and 8 Budhists.

Expenditure.—The total expenditure on Public Instruction rose by over Rs. 6 lakhs to Rs. 396 lakhs, of which 49·6

per cent. was met from Government funds, 18·2 per cent. from Board funds, 18·3 per cent. from fees, and 13·9 per cent. from other sources. Primary schools absorbed over Rs. 198 lakhs, exclusive of expenditure on inspection, construction, and repairs. Expenditure on buildings and apparatus in recognised institutions amounted to Rs. 16½ lakhs.

University.—The number of candidates for the School-leaving examination for the purposes of Matriculation increased by 364 to 8,535, of whom 5,189 or 60·8 per cent. passed. There were 662 successful candidates out of 1,574 examined for the Intermediate examination in Arts, the percentage of passes being 42·1. The number of successful candidates at the B.A. examination held in October 1928 and April 1929 was 694 as against 627 in the preceding year. Of the successful candidates, 151 obtained Honours—17 in Class I and 134 in Class II. In examinations for Professional degrees, excluding the Medical examinations, there were 662 successful candidates. The expenditure of the University, as distinct from the individual Colleges, and from the School of Economics and Sociology maintained by the University itself, was over Rs. 8 lakhs.

Arts Colleges.—The total number of students in the 15 Arts Colleges (including the University School of Economics and Sociology) increased by 108 to 7,193, of whom 418 were women as against 395 in the preceding year. The total expenditure on all the Arts Colleges (excluding the University School) was Rs. 19·51 lakhs.

Professional Colleges.—The number of students in the four Law Colleges increased by 76 to 1,175. The number of students receiving instruction in Commerce and Engineering was 283 and 342, respectively.

Education in Art.—The number of students at the Sir J. J. School of Art, Bombay, rose by 2 to 553, of whom 192 attended the Reay Arts Workshops. The School of Drawing and Design, Ahmedabad, had 33 students as against 39 in the preceding year.

Technical and Industrial Education.—The number of Technical and Industrial schools increased by 9 to 41, and the number of pupils in them by 50 to 2,686. The expenditure on these institutions increased by Rs. 60,986 to Rs. 5,81,464.

Secondary Schools.—The total number of Secondary schools increased by 17 to 587 and the number of pupils in them

by 5,355 to 113,933. The following table gives separate figures for High and Middle Schools :—

	Number of schools.	Number of pupils.
High Schools for Boys ..	195	74,682
Do. for Girls ..	58	11,975
Middle Schools for Boys ..	295	23,826
Do. for Girls ..	39	3,450
Total ..	587	113,933

The total expenditure of all Secondary schools was over Rs. 81 lakhs, a rise of over Rs. 3¼ lakhs.

Primary Schools.—Primary schools for boys increased by 167 to 12,926, and the number of pupils in them by 23,937 to 903,331. The number of girls under instruction in Primary schools was 220,597, an increase of 9,318.

The number of District Local Board and Municipal schools for boys and girls increased by 321 to 11,842, and the number of pupils in them by 27,242 to 898,255, the corresponding increases for the preceding year being 347 and 27,878. Aided schools decreased by 89 to 2,502, but the pupils in them increased by 2,542 to 138,624. Unaided schools remained stationary at 230, but the pupils in them decreased by 592 to 9,339. The number of schools for Adults increased by 10 to 265, and the number of pupils in them by 1,035 to 9,793.

The total expenditure on Primary education increased by Rs. 68,000 to Rs. 198·24 lakhs, which was met from the following sources :—

	Lakhs of Rupees.
Government funds	119·2
District Local Board funds ..	14·8
Municipal funds	41·9
Fees	5·1
Other sources	17·2

Training Institutions.—There were 13 Training Institutions for Men and 19 for Women, with 802 and 490 students, respectively. Of these, 15 with 827 students were under public management, and 17 with 465 students were under private management.

Muhammadans.—The total number of Muhammadans under instruction in recognised institutions increased by 9,185 to 206,780, of whom 44,133 were girls. The number of Muhammadan pupils in Arts Colleges increased by 5 to 359,

while that in Professional Colleges decreased by 15 to 131. In Secondary schools the number increased by 933 to 10,250, and in Primary schools by 8,298 to 192,128, while in Special schools it decreased by 36 to 3,912.

Intermediate and Backward Hindus.—The following table gives the number of pupils under instruction for the last two years :—

	1928-29	1927-28
Intermediate—		
Marathas	147,998	147,774
Cultivating Classes (Kunbis, Kolis, etc.)	181,310	168,722
Artisans	80,557	81,129
Lingayats	80,361	76,245
Total ..	490,226	473,870
Backward—		
Depressed Classes	63,077	63,620
Aboriginal and Hill Tribes and Criminal Tribes.	26,525	24,783
Others	35,589	41,353
Total ..	125,191	129,756

Reformatory Schools.—Of the three Reformatory schools in this Presidency, the Yeravda Reformatory School (172 pupils) is maintained by Government, the David Sassoon Industrial and Reformatory Institution, Bombay (366 pupils), is under the control of a Committee of Management, and the Willingdon Boys' Home, Bombay (58 pupils), is managed by the Salvation Army Mission.

The Juvenile Jail School, Dharwar, which is maintained by the Jail Department, had 292 pupils, an increase of 25.

Aden.—There were in all 52 schools in the Settlement of Aden attended by 2,928 pupils. There was one aided Primary Night School attended by 64 pupils.

Primary Schools.—There were three Primary Government Schools and eight Private Government Aided Schools at Crater, Tawahi and Sheikh Othman. The total number of pupils attending these schools was 1,116.

Indigenous Schools.—Eleven aided schools teach the Koran and elementary Arabic and Arithmetic to very small boys. Other aided schools teach only the Koran or Torah.

Secondary Schools.—The Government Anglo-Vernacular School at Crater teaches six standards, of which the sixth is preparatory for the Cambridge Junior Local Examination. The number of boys in the schools was 133.

The Government Anglo-Vernacular School at Tawahi was closed on 4th October 1928 as it was found to be superfluous and pupils from this school were given the option of attending the Government Anglo-Vernacular School at Crater, Government paying conveyance charges.

There were also eight Private Government Aided Secondary Schools (5 for Boys and 3 for Girls). The number of pupils was 374.

In spite of the large number of schools in Aden in proportion to the population, education is backward and unsatisfactory. This state of affairs is due to a variety of causes, some of which are peculiar to a small but diverse population living isolated from countries in which modern system of education exists.

In March 1929 an Education Advisory Committee was appointed to examine and report on questions affecting educational problems at Aden.

An Industrial School attached to the Government Anglo-Vernacular School at Crater teaches cabinet making and carpentry.

The total expenditure on education in Aden from all sources amounted to Rs. 1·09 lakhs of which about one-third was spent by Government.

YERAVDA REFORMATORY

There were 172 boys in the Reformatory School, Yeravda, during the year 1928-29 as against 156 boys in the previous year, their ages ranging from 10 to 18 years. Forty-seven were Muhammadans, six Brahmins, 28 Depressed Classes, five Christians, three Lingayats and 83 other Hindus.

The general behaviour of the boys was, on the whole, satisfactory. The number of offences committed during the year was 12 involving 21 boys as against 13 offences involving 25 boys during the previous year, there being thus no marked difference in the number of offences and of offenders as compared with other years. Four boys escaped, two from the school and two from the custody of their employers. Of these latter two, one was brought back to the Reformatory, while the other was sent to the Dharwar Juvenile Jail.

"The question of the after-career of discharged boys was under consideration for some time," says the Superintendent of the Reformatory School. "It has now been decided that the

Superintendent shall communicate with Released Prisoners' Aid Societies wherever they exist, or with Local Authorities (District School Boards or Municipalities) concerned that have expressed their willingness to take up the work of watching and influencing the future mode of life of boys discharged from this School."

The health of the inmates was satisfactory during the year. The total number of indoor patients in the School Hospital was 155 as against 214 of the previous year, while the daily average number of outdoor patients treated for minor ailments such as wounds or accidents in games was 28·87 as against 34·48 in the previous year.

Six trades were taught in the School, where 32 boys were trained in carpentry, 12 in smithy, 19 in painting, 19 in book-binding, 28 in tailoring, 29 in gardening and 28 in agriculture.

Primary education was imparted in the school up to the 5th standard in Marathi, Gujarati and Urdu. Regular moral instruction was given in the school room once a week by class teachers. Special attention was also paid to visual instruction.

The gross maintenance charges amounted to Rs. 44,247, while the total earning of the school from the factories and the gardens were Rs. 1,720. The net average cost per boy per annum was Rs. 254-15-6 against Rs. 267-10-1 in the previous year.

In March 1929 Government issued orders certifying this Reformatory School as fit for the reception of children or youthful offenders under the Bombay Children Act of 1924, and children or youthful offenders concerned will henceforth be admitted.

BOOKS AND PUBLICATIONS

In his note on the Vernacular Literature of the Bombay Presidency for 1928, Dr. Edward Parker, M.A., Ph.D., Professor of English, Elphinstone College, Bombay, remarks :—

"Real progress is being made, however slow, in the publishing trade and in literary activity in the Presidency, and that this is happening notwithstanding the well-known and lamentable depression in general commercial activity in India. Authors, at any rate, are not depressed, and there can be found here both the writers and the patrons for probably all the books which worthy literary activity can conceive and public interest will buy.

"The recent authoritative calculation that 40 books a day are being sent out from presses in England appears, at first glance, to cast the parallel figure of less than seven books a day for the

Bombay Presidency in the shade, and a further comparison of the size of the two publishing areas seems only to obscure still more the literary output in these parts. The factor of area, however, operates far less in any such comparison than the factors of old establishment of the trade and purchasing power of the public, and, when it is remembered that more than one publisher in England can look back on 200 years of his firm's activity and that the acquisition of even a small private library is and has long been the accepted thing among the English middle classes, not to speak of the accumulation of books among the well-to-do, the mind is much clearer to receive a true impression of the existing state of affairs in any part of India. It can be briefly stated that here there are no publishers except booksellers and that the number of these is exiguous and their age as publishers is of yesterday; that, for Indian-made books, there is no certain or rapid sale except for the class which is called educational literature; that finally, the financial condition of the small literate classes is such that books are a luxury and that, even so, the tradition among readers here is rather to beg, borrow or annex a book than to buy it for oneself.

"A better test of comparison would be the relative proportion of valuable and valueless books issued in England and in India. The system of review for this annual Note allows of a fairly close calculation of this proportion for the Bombay Presidency. It is a proportion of 7 per cent. valuable to 93 per cent. valueless, or, at least, scarcely valuable. One wonders, from an experience of selecting books from England for purchase by the oldest and largest library in Western India, whether the proportion of valuable books issuing from English presses is more than 20 per cent. or even 15 per cent.

"Looked at so, the condition of Indian publishing is not so bad as might be made out from mere figures. The publishing business is a trade here as everywhere, and the few Indian publishers, like their numerous European colleagues and rivals, consider the saleability of a manuscript and let every other consideration stand aside till that one is fulfilled before they publish, whatever may be the practice of altruistic motives by the English University presses and the claims to such motives made by commercial presses in the home country.

"All that can be truly said of Indian publishing, after a consideration of the output which is hereafter to be assessed in this Note, is that it works exactly on the same lines as publishing elsewhere, that it is in its infancy and a not unhealthy infancy at that, and that it has to reckon with a factor of poverty among

literates and a second factor of extensive illiteracy which are not found in Western Europe and America.

"One's sympathy, if any is to be given, is with the Indian author. Poor himself, he can very seldom find a publisher who will even look at his manuscript; he must, after the labour of writing his book, undergo the purification of his literary and scholastic ambitions by finding a moneyed patron. His position, as compared with that of men like George Moore, is to have the satisfaction of papering his study with letters of refusal instead of publishers' rejection slips."

The total number of books registered during the year increased by 188 or about 8 per cent. to 2,399. Of the books published, 677 were in Marathi, 506 in Gujarati, 346 in Sindhi, 240 in English, 101 in classical languages, 85 in Kanarese, 83 in Urdu, 79 in Hindi, 1 in French and 25 in other dialects; while 256 books were in more than one language.

"Miscellaneous" works which number 561, account for a little less than one-fourth of the total number of publications. "Poetry" comes next with 443 publications, followed by "Religion" with 386.

NEWSPAPERS

At the end of the year 1928, there were in all 284 newspapers concerned with current political topics as against 268 newspapers in the previous year. Ninety-seven newspapers were started during the year, but, on the other hand, 81 ceased publication. There was, therefore, a net increase actually of only 16.

Of these 284 newspapers, 83 were published in the City of Bombay; 50 in the Northern Division; 59 in the Central Division; 34 in the Southern Division; 55 in Sind; and three in the Indian States. One hundred and four or about 37 per cent. were in the hands of Brahmins, 109 were conducted by other Hindus; 12 by Jains; 12 by Parsis; 34 by Muhammadans; and 13 by Christians. Seven per cent. were published in English; 33 per cent. in Marathi; 22 per cent. in Gujarati; 3 per cent. in Hindi; 4 per cent. in Kanarese; 3 per cent. in Urdu; 15 per cent. in Sindhi; 0·3 per cent. in Persian; 0·3 per cent. in Arabic; and the remaining 13 per cent. were bilingual or tri-lingual newspapers.

ROYAL ASIATIC SOCIETY, BOMBAY

The year 1929 marks the 125th year of its existence and the history of the Society, from its foundation in 1804 as the Bombay Literary Society, is a part of history of Bombay.

The Society had 488 resident and 174 non-resident members at the close of the year 1928.

The issues of books and periodicals during the year amounted to 72,515 of which 13,264 were new books, 33,625 periodicals and 25,626 old books. The largest issue, about 21,000, was under fiction, while biography stood second (1,991) and oriental literature, etc., third (1,828). During the year 1,361 volumes were added to the Library, of which 1,072 were purchased and 289 were presented. Two hundred and two coins were added to the cabinet of the Society. The Society received 339 treasure trove coins during the year.

VICTORIA AND ALBERT MUSEUM, BOMBAY

The Museum was open to the public for 259 days during ten months of the year under report, and was temporarily closed to the public for the remaining two months as the roof over the galleries where the Industrial and Ethnological collections were exhibited, was in a dangerous condition and had to be renovated immediately. The number of visitors during the ten months was 773,079 giving a daily average of 2,985. Good progress was made in collecting specimens of agricultural interest and the collection attracted crowds of visitors particularly the show cases containing the scenes representing agricultural operations in fields and the lives of the agriculturists. The collection in the Old Bombay Room was made more comprehensive during the year.

PRINCE OF WALES MUSEUM OF WESTERN INDIA

According to the census taken as usual for a week during the year, the number of visitors was about 1,700 a day. Once a week visitors are admitted on payment of a small fee, admission on all other days being free. Excluding the paying day, the average shows that about 2,000 people per day visited the Museum during the year under review.

The work of classifying, arranging and labelling exhibits was proceeded with. In addition to the catalogues of exhibits and picture post-cards on sale at the Museum, the preparation of a descriptive and illustrative guide to the exhibits in the Art Section, the printing of picture post-cards of the Archæological exhibits and a catalogue of the talismanic cups are well under way. Local students and teachers were instructed as regards the various exhibits in the Museum, and scholars and distinguished visitors were also shown round the Sections.

Archæological Section.—Interesting antiquities from Jogeshwari caves were received on loan from the Director General of Archæology through the Superintendent, Archæological Survey. These antiquities, consisting of two relic chambers with stone lids, a chain with a small elephant, four hand-bells, an image of Ganpati, a carved piece of stone and two small tera cotta vessels, were exhibited in a group prior to their being separated for the purpose of classification. Bronze images of Bal Krishna and Parvati were received from Trichinopoly District as Treasure Trove finds. Some Buddhistic images were acquired and an inscription stone was obtained from Dohad. Articles on the Arabic inscription of Bai Harir and the Persian inscriptions from Surat were prepared for publication.

Coins of Kumaragupta, Skandagupta, the later Kushans and Guptas, the early Sultans of Delhi, the Sultans of Kashmir, and of Bahmani and Valabhi dynasties were arranged and exhibited. The lists of Mohamedan coins were brought up to date. The non-Mohamedan coins were arranged chronologically. The punch-marked coins were classified according to shape, size and signs.

Art Section.—Some interesting copies of old Venetian Silver presented by Lady Ratan Tata, the exhibits presented by Mr. F. R. Wadia and an example of hand-embroidery executed and presented by the Maharani Sahiba of Dhar (C.I.) and purchased paintings by some modern Indian Artists were exhibited. Photographs of some of the exhibits were supplied to the Inspector of Visual Instruction and others. Sir Akbari Hydari's copies of the paintings of the Ajanta Caves were catalogued. The preparation of an illustrative guide to interesting exhibits were proceeded with. Many of the exhibits were also re-labelled to advantage.

Natural History Section.—In the Mammal gallery, two attractive and instructive group cases, illustrating forest animals and plant life and the Kashmir stag in its natural surroundings were exhibited. The desert group case was renovated.

In the Bird gallery, the starling case was altered and the old specimens renewed. The birds, chats and thrushes were mounted on board. The egg collection was arranged and catalogued, and the reference collection of birds' skins cleaned and rearranged.

The fresh water snake cases illustrating colour, variation and protective colouring, were exhibited and plaster casts of other snakes were also prepared.

A cast of an enormous fish (perch), weighing 475 lbs., caught in Bombay harbour is being prepared.

The cataloguing of butterflies, and the preparation of mosquito model cases, illustrating the life history and malaria in Bombay are being proceeded with.

A few specimens of timber from the forests of the Presidency and Mr. J. Ribeiro's interesting collection of minerals of the Island of Bombay are on view. The minerals were rearranged and re-labelled.

The Garden and the ground continue to be a recreation and play ground for adults and children.

VICTORIA MUSEUM, KARACHI

The most important event was the opening of the Museum in the new building. Considerable time was taken up in shifting the exhibits and other appurtenances, and it could not be opened to the public before the 14th December 1928. The attendance was roughly 61,350 during the days it remained open in the year. The Museum was opened to the public on all days of the week excepting Wednesdays and the last Saturday of the month, when it was completely closed to the public for cleaning and disinfecting purposes. All Fridays were, as usual, set apart for Purdahnishin ladies only. Women were in attendance on these days inside the Museum. An interesting collection of Sind Forest specimens, consisting of the wood available in the Province of Sind, was presented to the Museum by the Conservator of Forests, Sind. Another valuable addition was a complete collection of invertebrata purchased for the Museum from America. Sixty-two copper coins and 18 silver coins were received during the year.

CHAPTER XII

ARCHÆOLOGY

THE Superintendent of the Archæological Department, Western Circle, remarks that both the masses and the intelligentsia are evincing increased interest in the preservation of the ancient relics of art and monuments in his Circle, and educated men are taking the initiative in archæological exploration and research. " It is undoubtedly a happy sign of the times," he says, " that with the awakening of a spirit of national consciousness the masses are displaying increased appreciation of the endeavours of the Department in preserving what constitutes the traditional fruits of their ancient and time-honoured civilization."

During the year under report, the progress of conservation works continued satisfactorily in this Circle. The net total grant sanctioned for such works was Rs. 1,15,928 as against Rs. 1,12,718 in the previous year. Of this total a sum of Rs. 29,815 was for the execution of repairs departmentally by the Archæological Superintendent and Rs. 86,113 were assigned to the Public Works Department for repairs undertaken through that agency.

Ahmedabad, Panch Mahals, Bijapur, Dharwar, Kolaba, Poona and other places, and Sind, were the most important centres where work was undertaken.

Altogether 60 special repair works were taken in hand during the year under report, of which 23 were in progress at the commencement of the year and 37 were new works.

In the Ahmedabad District, repairs to one of the two existing domes of the splendid Bahlolkhan Qazi's Masjid at Dholka were undertaken. Special repairs to the striking Fathi Masjid, locally known as Phutti Masjid, were under operation, besides repairs to the extensive retaining walls around the ancient Mansar Tank at Viramgam. The Viramgam Municipality is contributing ⅓rd of the estimated cost. Among the new works carried out were the clearance of *debris* due to the collapse of a part of the main gate of the citadel at Ahmedabad during the last rains, the reconstruction of a portion of it to the north side, and repairs to the terraced roof of the far-famed triple gateway, the pillared and spacious halls of Sayed Usman's Masjid and Tomb at Usmanpura. Further, the work of drainage

of the graceful Rani Sipri's Mosque and Tomb near the Astodia gate was completed and at the instance of the Mohammadan Community an electric installation was put in. The local Sunni Muslim Wakf Committee contributed Rs. 618, being $\frac{2}{3}$rd of the estimated cost of the above work. Trial works preliminary to the preparation of plans and estimates for the conservation of the marvellous palace of Azam Khan at Ranpur, and for exposing the plinth of Siddi Sayed's Mosque, decorated with beautiful perforated screens (Jali) depicting various floral designs, were undertaken.

In the Panch Mahals District, special repairs to the simple and charming Khajuri Masjid on the banks of Bada Talao and to one of the formidable gates to the hill-fort at Pavagadh and to several other fine ancient monuments remarkable for their outstanding architectural characteristics were continued. In addition to this, the work of special repairs for providing coverings to two openings of the granaries at the palace of Pattai Rawal on the Pavagadh hill-fort, and for exposing the wide steps leading to some well or room underground near the graceful Lila Gumbaz Masjid, were under execution. Arrangements were made for restoring the dilapidated ancient culvert over the river Vishwamitri on the way to Gabal Shah's stepped well. Preliminary special works to the magnificient triple-shrined Mahadeva's temple at Kankanpur were under progress.

In the Bijapur District, special repairs to the compound wall of the sacred Asar Mahal, or " palace of relics," at Bijapur, the work of filling in the cracks in the dome of the splendid Gol Gumbaz, removing modern accretions of Causeways, levelling a portion of the inner compound at the southern side of the main platform, and also repairs to the excellent reservoir of Masa Bavdi nearby were undertaken. Special repairs and treatment of the area around the incomplete Mausoleum of Sikandar Adil Shah of the Adil Shahi Sultans of Bijapur, and the work of cutting the wild growth of cactus on the ancient city walls in order to provide facilities to interested visitors were attended to. The spacious water pavillions at Kumatgi, the ruined high walled Sangit Mahal at Bijapur, and the Suvali temple at Badami were also treated. The roof of a temple in the Konti gudi group at Aiholi in the same District, was made water-tight by providing cement concrete rolls to the open joints according to the old method of construction in the adjoining temple.

In the Dharwar District, special repairs to the noble edifice of Tarakeshwara Temple at Hangal were commenced.

Archæological Department—Rayagad Fort, Kolaba, Sri Shivaji's samadhi. [*Facing page 248*

In Kolaba District, the work of construction of retaining walls on both sides of the historic Cave No. 1 at Elephanta (Gharapuri), and the erection of quarters for whole time servants, e.g., Ramoshis and Peons, are nearing completion.

In the Poona District, the work of exposing the remains of the ancient compound walls and the plinth of the main platform of the Habshi Gumbaz at Junnar, and repainting the four marble tablets of the War-Monument at Koregaon, were carried out. The work of opening out pathways to the hitherto inaccessible group of Caves to the west side of the hill-fort of Sivaneri at Junnar was attended to. It may be interesting here to note that traces of fresco paintings were discovered in the ceiling of a Vihara Cave in this group. The repairs to the retaining walls around the Chhatri constructed over the *Samadhi* of Sivaji at Raigarh have been completed.

Another special repair work worthy of mention is that executed to the tombs of the independent Farruqi Kings at Thalner in West Khandesh District.

Repairs to the famous Begam's Tomb at Ghodesvara in the Sholapur District were taken in hand.

Enamelled steel notice-boards of warning to visitors to protected ancient monuments were purchased and erected.

Among the interesting finds during the year under report may be mentioned a sculptured nymph with her lower part resembling serpents, from the Portuguese fort at Bassein, and about 40 maunds of coats of mail, greaves, gauntlets, etc., near the Godhra gateway at Champaner. In addition to the finds mentioned in the departmental reports for the years 1925-26 and 1926-27 thirteen treasure trove coins of Sultan Jalaluddin Firuzshah Khalji, Alauddin Mohammad Shah Khalji, Ghiasuddin Balban, Nasiruddin Mohammad Shah of Delhi and of the East India Company, were recovered from the Jogesvari Caves, and were lent to the Prince of Wales Museum of Western India for exhibition.

A sum of Rs. 29,894 was spent on the upkeep of the office of the Superintendent, Archæological Survey, Western Circle, during the year 1928-29.

CHAPTER XIII

MISCELLANEOUS

ECCLESIASTICAL JURISDICTION

THE Church Establishments maintained by the State in the Presidency are those of the Established Church of England and the Established Church of Scotland. Certain allowances are also granted by Government to the Roman Catholic Church and the Wesleyan Church for ministrations to troops, etc.

THE ESTABLISHED CHURCH OF ENGLAND

Since 1837 Bombay has been a separate Diocese.

The Diocese includes the territories within the limits of the Presidency of Bombay excepting Sind, which was transferred to the Diocese of Lahore in 1877.

The Right Reverend Edwin James Palmer, M.A., D.D., Bishop of Bombay, was on duty up to the beginning of February when he proceeded on leave preparatory to retirement. The Venerable H. Martindale, M.A., took charge of the Diocese and held it up to the end of the year.

The Venerable H. Martindale, M.A., was on duty as Acting Archdeacon up to the 24th September 1928 and afterwards as Archdeacon.

The Reverend J. L. C. Dart, M.A., held the post of Domestic Chaplain to the Bishop throughout the year which opened with 15 Chaplains on duty and three on leave. At the close of the year 14 Chaplains were on duty and four on leave. One Chaplain retired, one was transferred to the Madras Ecclesiastical Establishment and two died.

The Bishop held 17 confirmations during the year and the number of persons confirmed was 396. There was one ordination.

During the year the Venerable H. Martindale, M.A., was installed as Archdeacon of the Diocese and the Reverends C. B. G. Collier, M.A., G. F. Harvey, M.A., Establishment Chaplains, and the Reverend R. D. Acland, M.A., Secretary of the Society for the Propagation of the Gospel, were installed as Honorary Canons of St. Thomas' Cathedral, Bombay.

The Districts of Nasik, Ahmednagar and East and West Khandesh and the Suba of Aurangabad in the Nizam's

Dominions were separated from the Diocese and formed into a new Diocese called the Diocese of Nasik. The Right Reverend P. H. Loyd, M.A., Assistant Bishop in the Diocese of Bombay, was installed as its first Bishop in St. Andrew's Church, Nasik, on the 25th January 1929.

THE ESTABLISHED CHURCH OF SCOTLAND

The Church of Scotland in this Presidency was placed on its present basis in 1837 and the sanctioned number of chaplains on the Bombay cadre of the Indian Ecclesiastical Establishment Church of Scotland is five.

There are at present five Presbyterian Churches and several other buildings used for Divine service scattered throughout the Presidency of Bombay.

The Reverend R. E. Lee, M.A., M.C., B.D., officiated as Presidency Senior Chaplain until the return from leave of the Reverend G. C. Macpherson, O.B.E., M.A., B.D., on 12th November 1928.

During 1928-29 St. Andrew's Church, Bombay, and the churches at Poona, Kirkee and Karachi were served by chaplains on the Indian Ecclesiastical Establishment of the Church of Scotland. At Quetta the duties were performed by a Wesleyan Chaplain, at Mhow by a Missionary of the Canadian Presbyterian Mission of Central India, at Belgaum by a Missionary of the Methodist Episcopal Church, at Nasirabad and Aden by Missionaries of the United Free Church of Scotland and at Rajkot by a Missionary of the Irish Presbyterian Church. All Chaplains and acting chaplains of the Church of Scotland minister to His Majesty's Forces and Civilians.

STATIONERY

The value of stores purchased by the Stationery Office during the year 1928-29 together with that in stock on the 1st April 1928 amounted to Rs. 13·32 lakhs, while the value of supplies made to various Government Departments and Presses during the year under report was Rs. 9·43 lakhs. The value of stocks held at the end of the year was reduced by a substantial figure amounting to nearly Rs. 1 lakh, due to a change in the method of making purchases, whereby the office was enabled to hold smaller stocks and avoid surpluses which accumulate and perish or deteriorate.

In furtherance of the declared policy of Government to foster Indian industries a few more Indian manufactured articles were examined and tested and were included in the

tenders. In addition to the purchase of the usual varieties of Indian-made paper, *viz.*, Badami—inferior and superior, printing and cream laid, the office purchased during the year Rs. 5,800 worth of typewriter paper of Indian manufacture from the Titaghur Paper Mills Co., Ltd., Calcutta, for an extended trial and as it proved suitable, it was included in the list of contract articles of Indian manufacture. Two more papers, *viz.*, Blotting and Roneo Impression, were also added to the tender form. Contracts for the supply of paper were given to the Deccan Paper Mills Co., Ltd., Poona, for Badami—superior and inferior and cream laid and to the Titaghur Paper Mills Co., Ltd., Calcutta, for the printing paper.

Orders were issued allowing officers the option of selecting typewriters of any make which they considered suitable to their requirements and requesting Heads of Offices especially in Bombay City to give the British Imperial Typewriter a trial. Consequently a large number of these machines were demanded. The total number of machines purchased during the year amounted to 183 of which 73 were Remingtons and 59 British Imperial. During the year under report 383 typewriting machines were repaired by the office, only 44 machines being entrusted to outside firms for repairs.

PRINTING

Government Central Press, Bombay.—The reduction of establishment and the transfer of the special forms and the non-urgent book-work from the Yeravda Prison Press to this Press was carried out smoothly and it had the much desired effect of reducing the payment for idle time in the Machine Room. The total expenditure amounted to Rs. 9·18 lakhs, a decrease of Rs. 4·33 lakhs over the preceding year, and the cost of paper binding and rubber stamp materials was Rs. 1,19,000. In examining the figures of outturn it will be found that Linotype Composition and items such as Pressing, Gathering, Gold-Blocking, Envelope-making and Embossing showed a decline, whereas Monotype Composition, Machine Printing, Folding and Inserting showed a marked increase. Rubber stamps, however, showed a slight increase in outturn and a corresponding decrease in cost during the year. With a few exceptions the rate per unit has gone down over the year's working and when compared as a whole, the outturn for 1928-29 showed an increase of 15 per cent. over that of the previous year, while the working cost increased only by 8 per cent.

Yeravda Prison Press, Poona.—The labour supply continued steady during the year. The work at this Press decreased to some extent owing to the special form-work and the non-urgent book-work transferred to the Government Central Press, Bombay. The outturn, taken as a whole, showed an increase of 9 per cent. over that of the previous year and the working cost reduced by about 6 per cent. The orders of Government on the de-standardization of a large number of standard forms were received during the year and as these forms also will, in future, be printed at the Government Central Press, Bombay, on quinquennial requisitions, there will be a further reduction in the value of work done at this Press.

Commissioner-in-Sind's Press, Karachi.—The total earnings for the year amounted to Rs. 1·55 lakhs as against Rs. 1·84 lakhs, while the total expenditure was Rs. 1·31 lakhs as against Rs. 1·35 lakhs in the previous year. Almost all the sections showed a uniform decrease of outturn. Taken as a whole, the outturn for the year decreased by about 19 per cent. and the working cost by about 2 per cent. only.

Government Book Depot, Bombay.—The publication and sale of the *Bombay Government Gazette* and the Indian Law Reports were transferred to the Publication Branch from the Government Central Press, Bombay, and the Yeravda Prison Press, respectively, for administrative convenience and economic handling and accounting. The total receipts amounted to Rs. 63,895 during the year under report. The value of Maps issued during the year 1928-29 rose from Rs. 3,380 to Rs. 4,781 on account of the transfer of a large number of City Survey Sheets from the office of the Collector of Bombay.

Government Photozinco Press, Poona.—The total cost of work turned out by the Press was Rs. 1,66,000 as against Rs. 1,54,700 in the previous year.

BOMBAY DEVELOPMENT DEPARTMENT

BACK BAY RECLAMATION SCHEME.

In accordance with the recommendation of the Advisory Committee, which was accepted by Government, the reclamation of block no. 2 was undertaken, during the year under report, by wet or pumped filling. This was commenced on 2nd November 1928, prior to which the timber gantry for carrying the shore pipe lines and the bund on the south side of block no. 2 for closing the gap there and retaining the pumped filling were constructed.

Considerable delay was experienced throughout the season owing to the bursting of the old 39" diameter and 42" diameter floating pipes which had worn very thin. Dredging operations ceased on the 28th March when the sloping pipe connecting the floating pipe line to the shore was pulled out of the socket and damaged owing to the heavy swell. The actual quantity of material removed from Back Bay during the season was 1,084,588 cubic yards.

The "Kalu" gave very satisfactory results in this the last year of its working. The unit cost, too, was low, being just under 11 annas per cubic yard.

Dry filling was the principal work carried out during the year. It was done entirely by contract. The dry filling was obtained from Kandivli and Malad, both on the B. B. &. C. I. Railway, about 20 miles from Bombay.

The total quantity brought in during the year was 1,235,000 tons of which 1,055,000 tons were tipped in block 8, 3,000 tons in block 7 and 177,000 tons in block 2. The total cost of this material to the Department worked out at about Rs. 1-3-0 per ton or per cubic yard. At the end of the year dry filling of block 8 was completed with the exception of an area of 50,000 square yards only which remained to be filled in and brought up to the formation level.

In addition to the dry filling brought in by train, about 111,000 cubic yards of dry filling, consisting of building rubbish, were deposited from motor lorries in blocks 1 and 2 at an average cost of about Re. 0-10-0 per cubic yard.

Storm water drain No. 6 was completed during the year.

The rubble mound under the sea-wall between Marine Lines and Churchgate stations having sunk to a certain extent during the monsoon of 1928 a considerable quantity of rubble was tipped in front of the rubble mound in order to make good the shrinkage that had occurred.

INDUSTRIAL HOUSING SCHEME

The progress in opening new chawls during the last year was checked by the partial mill-strike in January 1928 and this was followed by a severe set-back due to the prolonged general mill-strike which lasted from April to October 1928 and to the generally disturbed industrial conditions thereafter. At the end of the year, there were 124 chawls in occupation as against 123 in the previous year.

The total number of tenants at the end of the year in all the four chawl areas was 6,805 as against 7,678 in the previous year,

the decrease being due mainly to (*a*) the general strike in April 1928, (*b*) the disturbances at Sewri in November, and (*c*) the riots in February 1929.

Three chawls at Worli were placed at the disposal of the Police Department for accommodating under-trial prisoners from 11th February 1929 to 23rd March 1929 and suspicious characters arrested during the riots in February.

Out of the two chawls converted into two and three-roomed tenement as an experimental measure—one at Naigaum and the other at DeLisle Road—the chawl at Naigaum continued to be fully let as in the previous year as two-roomed tenements with the odd rooms let singly, but the chawl at DeLisle Road remained mostly vacant.

The fall in tenancies caused a corresponding decrease in the number of occupied shops. Seven shops at Naigaum, sixteen at Worli and two at Sewri were vacated during the year.

In the market at Worli only 20 stalls out of 103 were occupied as against 15 at the end of the last year.

The actual collection of rent showed a large decrease as compared to last year, only Rs. 4,47,915 having been collected as against Rs. 6,54,520 collected in the year 1927-28. The percentage of collections to the assessment for the year was only 78 as against 98 in the two previous years.

The total amount due from absconders was Rs. 60,388 as against Rs. 14,394 in the previous year and Rs. 70,238 in the strike year 1925-26. The total amount written off during the year was Rs. 20,950 on account of irrecoverable arrears of previous years, as against Rs. 27,656 during the preceding year. The total arrears recoverable and irrecoverable on 31st March 1929 were Rs. 1,65,088 as against Rs. 57,022 on 31st March 1928.

The Industrial Housing Schemes are provided with a number of amenities. Schools are established at Naigaum, DeLisle Road and Worli. The Infant Welfare Society, the Y.M.C.A., the Y.W.C.A. and the Hindu Maha Sabha are doing excellent work in the chawl areas. The Bombay Presidency Boy Scouts Association have opened a section in one of the chawls at Worli and are doing very good work among the boys there. The establishment of two police chowkies at Worli has also been greatly appreciated by the tenants and police protection of this area is quite satisfactory. A municipal dispensary at Worli is freely used by the tenants.

It was decided by Government that the management of the Industrial Housing Scheme should be transferred to the

Collector of Bombay under the control of Government in the Revenue Department during the year 1929-30.

SUBURBAN SCHEMES

The sales of land were better during the year than in the previous year. The total area disposed of was 82,352 square yards valued at Rs. 4,62,113, mostly in Chembur, Danda and Khar Schemes. Adding this to the areas disposed of in previous years, the total area disposed of up to the 31st March 1929 comes to 565,855 square yards valued at Rs. 26,44,800.

The state-aided building scheme continued to encourage the purchase of plots in Suburban Scheme No. VII (Khar). The number of persons who availed themselves of the scheme was 53, the total amount of advances on land and buildings being Rs. 5,86,083.

At Chembur (Sector "A"), a few bungalows and cottages were erected. Altogether sales and settlements of 32,300 square yards valued at Rs. 70,673 were effected during the year, while a few settlements with the owners of land on the Sion-Trombay Road were also carried out. About 18 acres of land notified for acquisition were denotified. At Wadavli (Sector "B"), 7,584 square yards were disposed of by way of settlements and a portion of this sector was also denotified. In Sector "C", an area of 500 square yards valued at Rs. 1,250 was sold and 700 square yards disposed of under settlement.

All the roads in Suburban Scheme No. 6—Danda were handed over to the Bandra Municipality for future maintenance. 13,621 square yards valued at Rs. 1,04,940 were disposed of. Seven bungalows have so far been built and one is in the course of construction. The increased disposals in this scheme were due to a reduction in the rates, the division of plots as required by intending purchasers and the electrification of the locality.

A portion of the 5th road in Sector "A" and portions of the 13th and 16th roads in Sectors "C" and "D" of Suburban Scheme No. 7 (Khar Model Suburb) were constructed. All completed roads in Sectors "A" and "B" and also 1st and 14th roads in Sectors "C" and "D" were taken over by the Bandra Municipality during the year.

As in past years the demand for land continued to be greater in this scheme than in any other. The Bandra Municipality having built market stalls, shop plots round about the market site and near the railway station were sold to the extent of 10,845 square yards valued at Rs. 1,17,625. In Sector "B", 6,000 square yards valued at Rs. 48,455 were disposed of. 400 square

yards out of the promenade area have been leased to the Khar Residents Association for recreation purposes on a nominal rent.

The sales in Sectors " C " and " D " were not satisfactory at the commencement of the year, but after a reduction in rates, an area of 16,732 square yards valued at Rs. 1,05,048 was sold. About 500 square yards at the junction of the 1st Road and Linking Road have been reserved for the Police Department. Another plot has been sold to the Bandra Municipality for a municipal school at a concession rate.

In all 202 bungalows were constructed and 20 more are under construction in all the four sectors. The extension of the 1st Road to meet Carter Sea Face Road will effect a great improvement in the layout of the locality.

In Suburban Scheme No. 8 (Chapel Road, Bandra) only three plots measuring 2,265 square yards valued at Rs. 14,044 remain for disposal. In all 52 bungalows have so far been constructed and 10 are under construction.

There was not much development in industrial schemes, but extensions of water supply schemes including those to Versowa, Amboli, Willingdon South, Santa Cruz Town Planning Scheme No 4 and 1st Road in Sectors " C " and " D " of Khar were completed during the year.

Though there was no improvement in the prices of land owing to industrial and commercial conditions in Bombay, building activity in the Bombay Suburban District was satisfactory during the year, and the number of plans sanctioned for the erection of buildings in suburban and town planning schemes rose from 232 in 1926-27 and 289 in 1927-28 to 357 during the year under report.

RAILWAY SCHEMES

The Central Salsette Tramway was transferred to the G.I.P. Railway last year and the service commenced to run in January 1928 between Andheri and Wadavli. The passenger traffic is fairly good. The G.I.P. Railway are also in charge of the whole of the Kurla Trombay Railway from Kurla Station to Mandala, a distance of about 4½ miles.

MILITARY (INDIAN AUXILIARY AND TERRITORIAL FORCES)

Auxiliary Force (India).—There has been no change in the organization of the Auxiliary Force (India) since the last report. An attempt was made early in 1929 to raise a Heavy Battery of Royal Artillery, A.F.(I), in Bombay, but all efforts to stimulate recruiting were without avail, and the project was

eventually abandoned. The Auxiliary Force (India) were twice embodied in aid of the Civil power during communal riots in Bombay and their services received special recognition from the Government of Bombay.

Indian Territorial Force.—Two Indian Territorial Force units have recently been constituted in Bombay, but recruiting is slow and they have made little progress.

Karachi Corps Auxiliary Force (India).—Progress was satisfactory. Three officers and 46 other ranks joined the corps during the year. No. 2 (Karachi) Company, Machine Gun Corps, were successful in winning the Nanpara Cup, as well as being placed second in the Simla Rifles Cup competition. The Corps were also placed second in the Auxiliary Force (India) Regimental Match competition.

No. 11 (Karachi) Company, University Training Corps, Indian Territorial Force, was formed at the end of last year and the present enrolled strength is six officers (senior grade) and 145 other ranks. Progress was satisfactory in spite of the fact that vacations interferred with training.

PREVENTION OF CRUELTY TO ANIMALS

Bombay and Karachi Societies.—During the year 1928 the Agents of the Society in Bombay City prosecuted 18,490 cases of cruelty to animals. In 15,726 cases fines were inflicted, in 143 cases the offenders were fined or in default sentenced to various terms of imprisonment, in 677 the accused were warned and discharged and in 425 the accused were acquitted. In 1,518 cases 1,547 animals were sent to the Bai Sakarbai Dinshaw Petit Hospital for Animals for treatment, while 212 animals found to be suffering from incurable diseases were sent from the Hospital to the Pinjrapole at Bombay. In Bandra there were 616 prosecutions, fines being inflicted in 614 cases. In one case the accused was warned and discharged and in the other case the accused was acquitted. The amount of fine levied in cruelty cases prosecuted by the Society's Agents is given to the Society by way of grant after deducting 5 per cent. for Government expenses. The amount thus received by the Society in 1928 by way of Police fines was Rs. 37,040 out of the total receipts of Rs. 38,199. The expenditure was Rs. 45,704, thus leaving a loss of Rs. 7,505 to the Society.

In Karachi, 3,967 cases of cruelty to animals were instituted by the Inspectors of the Society as against 3,040 in the previous year. The number of animals involved was 4,691 as against 3,705. In 3,858 cases the accused were convicted. The

total realizations from fine including arrears of the previous year were Rs. 13,761. The expenditure was Rs. 10,937.

Besides these Societies there are similar Societies in the Bombay Presidency at Ahmedabad, Surat, Nasik, Poona, Ahmednagar, Sukkur, Shikarpur, Larkana and Hyderabad.

ADVANCES TO CULTIVATORS*

Northern Division.—The total amount advanced as takavi totalled Rs. 78,000 as against Rs. 67·61 lakhs during the previous year. The decrease was due to large advances made in the previous year for reconstruction of houses damaged by floods in the four Northern Districts of Gujarat. Out of the total outstanding balance of Rs. 92·18 lakhs at the beginning of the year, Rs. 18·05 lakhs were recovered and Rs. 5·14 lakhs were suspended.

Central Division.—The amount advanced decreased from Rs. 1·15 lakhs to Rs. 70,000. The year opened with the outstanding balance of Rs. 24·32 lakhs of which Rs. 9·18 lakhs were collected, Rs. 14,000 were suspended and Rs. 8,700 were written off.

Southern Division.—The year opened with an outstanding balance of Rs. 18·24 lakhs. Advances and collections amounted to Rs. 3·19 lakhs and Rs. 3·03 lakhs respectively. The amount collected represented 16·59 per cent. of the debt outstanding at the beginning of the year. One thousand three hundred and eighty-six takavi works at Belgaum, Bijapur, Dharwar and Kolaba were in progress.

Sind.—Takavi advances amounted to Rs. 3·73 lakhs as against Rs. 28·74 lakhs in the preceding year. The decrease was most marked in the three districts of Thar Parkar, Hyderabad and Karachi where in the preceding year liberal grants of takavi were made owing to damage caused by heavy rains. Out of the total outstanding balance of Rs. 45·9 lakhs, Rs. 23 lakhs fell due for collection during the year of which Rs. 8·57 lakhs or 37·26 per cent. were collected, and Rs. 33,000 were written off.

It should be noted that the figures for outstandings and collections do not mean that the amount was due for collection during the year. They represent the total amount of advances outstanding but not necessarily due for collection in the year under review.

* This note was received too late for inclusion in Chapter V.

APPENDIX I

RESERVED SUBJECTS

(1) Water supplies, irrigation and canals, drainage and embankments, water storage and water power.
(2) Land Revenue Administration.
(3) Famine Relief.
(4) Land Acquisition.
(5) Administration of Justice.
(6) Provincial Law Reports.
(7) Administrator-General and Official Trustee.
(8) Non-judicial stamps ; judicial stamps.
(9) Development of mineral resources which are Government property.
(10) Industrial matters, included under the following heads :—
  (*a*) Factories ;
  (*b*) Settlement of labour disputes ;
  (*c*) Electricity ;
  (*d*) Boilers ;
  (*e*) Gas ;
  (*f*) Smoke Nuisances ; and
  (*g*) Welfare of labour and housing.
(11) Ports (with certain exceptions).
(12) Inland water-ways, including shipping and navigation, not declared central subjects.
(13) Police, including railway police.
(14) (*a*) Regulation of betting and gambling ;
  (*b*) Prevention of cruelty to animals ;
  (*c*) Protection of wild birds and animals ;
  (*d*) Control of poisons ;
  (*e*) Control of motor vehicles ; and
  (*f*) Control of dramatic performances and cinematographs.
(15) Control of newspapers, books and printing presses.
(16) Coroners.
(17) Excluded Areas.
(18) Criminal Tribes.
(19) European vagrancy.
(20) Prisons, prisoners (except State prisoners) and reformatories.
(21) Pounds and prevention of cattle trespass.
(22) Treasure trove.
(23) Provincial Government Presses.
(24) Elections, Indian and Provincial.
(25) Regulation of medical and other professional qualifications and standards.
(26) Local Fund Audit.

(27) Control of members of all-India and provincial services serving within the province and control of public services within the province other than all-India services.
(28) Sources of provincial revenue—
  (*a*) taxes included in the Schedules to the Scheduled Taxes Rules, or
  (*b*) taxes, not included in those Schedules, which are imposed by or under provincial legislation which has received the previous sanction of the Governor General.
(29) Borrowing of money on the sole credit of the province.

TRANSFERRED SUBJECTS

(1) Local Self-Government (except Cantonments).
(2) Medical administration.
(3) Public health, sanitation and vital statistics.
(4) Pilgrimages within British India.
(5) Education (with some exceptions).
(6) Public Works—
  (*a*) Construction and maintenance of provincial buildings.
  (*b*) Roads, bridges, ferries, etc.
  (*c*) Tramways within municipal areas.
  (*d*) Light and feeder-railways and extra-municipal tramways for which provision is made by provincial legislation.
(7) Agriculture.
(8) Civil Veterinary Department.
(9) Fisheries.
(10) Co-operative Societies.
(11) Forests.
(12) Excise.
(13) Registration of deeds and documents.
(14) Registration of births, deaths and marriages.
(15) Religious and Charitable Endowments.
(16) Development of industries, including industrial research and technical education.
(17) Stores and stationery required for transferred Departments.
(18) Adulteration of food-stuffs and other articles.
(19) Weights and measures.
(20) Libraries, museums and exhibitions (with certain exceptions).
(21) Historical monuments (with certain exceptions).
(22) Town planning and development in municipal areas (except cases dealing with the Bombay City and Suburban Division).

APPENDIX II

List of Official Reports used in the compilation of this Volume

PART II

CHAPTER I

INDIAN STATES

Annual Reports of the Indian States referred to in the Chapter and of Aden for the year 1928-29.

CHAPTER II

LAND RECORDS

Annual Report of the Department of Land Records in the Bombay Presidency (including Sind), Report of the Collector and Talukdari Settlement Officer, Ahmedabad, and the Report on the Administration of Incumbered Estates in Sind for the year 1928-29.

CHAPTER III

LAW AND JUSTICE

Reports on the Administration of Civil and Criminal Justice in the Bombay Presidency and Sind and Report on the Administration of the Registration Department for the year 1928, Annual Report on the working of the Indian Companies Act, 1913, and Proceedings of the Bombay Legislative Council for the year 1928-29.

CHAPTER IV

POLICE AND CRIME

Annual Police Reports of the Bombay Presidency, Sind and Aden, Annual Report of the Bombay City Police, Administration Reports on Government Workhouses and of the Bombay Jail Department and the Report on the working of the Criminal Tribes Act in the Bombay Presidency for the year 1928.

CHAPTER V

AGRICULTURE, WEATHER AND CROPS

The Season and Crop Report of the Bombay Presidency, Report of the Department of Agriculture, Land Revenue Administration Report of the Bombay Presidency, including Sind, Annual Report on the working of Co-operative Societies in the Bombay Presidency, Annual Report on Forests, Note on the Weather of the Bombay Presidency and the

Annual Report of the Empress and Bund Gardens, Poona, for the year 1928-29.

CHAPTER VI

TRADE AND COMMERCE

Annual Report of the Department of Industries for the year 1928-29, Annual Factory Report of the Bombay Presidency and Annual Report on the working of the Workmen's Compensation Act for the year 1928, Report on the Administration of the Bombay Boiler Inspection Department, Annual Report of the Bombay Smoke Nuisances Commission, Annual Report on the Sea-borne Trade of the Bombay Presidency, Report on the Maritime Trade of the Province of Sind, Report on the Trade and Navigation of the Port of Aden and Annual Reports on Shipping Offices, Bombay, Karachi and Aden, for the year 1928-29.

CHAPTER VII

PUBLIC WORKS

Administration Report of the Public Works Department for the year 1928-29.

CHAPTER VIII

VITAL STATISTICS AND MEDICAL RELIEF

Annual Report of the Director of Public Health for the Government of Bombay for the year 1928, Triennial Report on Civil Hospitals and Dispensaries for the triennium 1926-28, Annual Report of the Haffkine Institute and Report on Mental Hospitals for the year 1928, Report on Vaccination in the Bombay Presidency for the year 1928-29, Annual Report of the Chemical Analyser to Government, Bombay, for the year 1928, and Annual Administration Report of the Civil Veterinary Department in the Bombay Presidency, including Sind, for the year 1928-29.

CHAPTER IX

LOCAL SELF-GOVERNMENT

Report on Municipal Taxation and Expenditure for the Bombay Presidency, including Sind, Administration Report of the Municipal Commissioner for the City of Bombay, Annual Report on Local Boards in the Bombay Presidency, Administration Report of the City of Bombay Improvement Trust and Annual Reports on Port Trusts, Bombay, Karachi and Aden, for the year 1928-29.

CHAPTER X

FINANCIAL REVIEW

Annual Report on the Sea-borne Trade and Customs Administration of the Bombay Presidency, Report on the Maritime Trade of the Province

of Sind, Reports on the Administration of the Salt Department of the Bombay Presidency, Sind and Aden, Reports on the Administration of the Excise Department in the Bombay Presidency, Sind and Aden, Annual Report of the Stamp Department in the Bombay Presidency and Sind, and the Annual Report on Income Tax for the year 1928-29.

CHAPTER XI

INSTRUCTION

Report of the Director of Public Instruction in the Bombay Presidency for the year 1928-29, Report of the Reformatory School at Yeravda and the Report of the Royal Asiatic Society (Bombay Branch) for the year 1928, Administration Report of the Municipal Commissioner for the City of Bombay and the Annual Report of the Victoria Museum, Karachi, for the year 1928-29.

CHAPTER XII

ARCHÆOLOGY

Report of the Archæological Survey of India, Western Circle, for the year 1928-29.

CHAPTER XIII

MISCELLANEOUS

Administration Reports for the Diocese of Bombay and of the Presidency Senior Chaplain, Church of Scotland, Bombay Presidency, Annual Report on Government Printing and Stationery, and the Report on the working of the Development Department for the year 1928-29, and the Annual Reports of the Bombay and Karachi Societies for the Prevention of Cruelty to Animals for the years 1928 and 1928-29 respectively.

APPENDIX III

1928-29.

GOVERNOR

His Excellency the Right Honourable Sir Leslie Orme Wilson, P.C., G.C.I.E., C.M.G., D.S.O. (Vacated office, 8th December 1928).

His Excellency the Right Honourable Sir Frederick Hugh Sykes, P.C., G.C.I.E., G.B.E., K.C.B., C.M.G. (Took his seat, 9th December 1928).

MEMBERS OF COUNCIL

The Honourable Sir Chunilal V. Mehta, Kt., K.C.S.I. (Vacated office, 21st September 1928).	Finance Member and Vice-President of Council.
The Honourable Mr. G. B. Pradhan (Took his seat, 22nd September 1928).	Finance Member.
The Honourable Sir Cowasji Jehangir (Junior), K.C.I.E., O.B.E. (Vacated office, 22nd June 1928).	General Member.
The Honourable Sir Ghulam Husain Hidayatullah, Kt. (Took his seat, 23rd June 1928).	
The Honourable Mr. J. L. Rieu, C.S.I. (on leave).	Revenue Member and Vice-President of Council.
The Honourable Mr. G. W. Hatch, C.I.E. (Temporary) (From 24th March 1928 to 5th July 1928).	Revenue Member.
The Honourable Mr. J. E. B. Hotson, C.S.I., O.B.E. (on leave).	Home Member
The Honourable Mr. J. R. Martin, C.I.E. (Temporary) (From 23rd June 1928 to 19th October 1928).	

MINISTERS

The Honourable Sir Ghulam Husain Hidayatullah, Kt. (Vacated office, 22nd June 1928).	Local Self-Government.
The Honourable Mr. G. B. Pradhan (From 23rd June 1928 to 21st September 1928).	
The Honourable Diwan Bahadur Harilal Desaibhai Desai (Took his seat, 22nd September 1928).	
The Honourable Diwan Bahadur Harilal Desaibhai Desai (Vacated office, 21st September 1928).	Education.
The Honourable Moulvi Rafiuddin Ahmed (Took his seat, 22nd September 1928).	

The Honourable Mr. G. B. Pradhan (Vacated office, 22nd June 1928). The Honourable Moulvi Rafiuddin Ahmed (From 23rd June 1928 to 21st September 1928). The Honourable Mr. B. V. Jadhav (Took his seat, 22nd September 1928).	Agriculture.

BOMBAY LEGISLATIVE COUNCIL

PRESIDENT

The Honourable Mr. Ali Muhammad Khan Dehlavi.

DEPUTY PRESIDENT

Rao Bahadur Siddappa Totappa Kambli.

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BOMBAY PRESIDENCY
Scale of Miles
REFERENCE
District Head Quarters
Metalled Roads
Unmetalled Roads
Kutcha Roads or Cart Tracks
Railway open & Railway Station
Heights above mean Sea level
PUNJAB
RAJPUTANA AGENCY
CENTRAL INDIA AGENCY
CENTRAL PROV.
BERAR
HYDERABAD
MADRAS PRESY.
MAISUR
KARACHI
JACOBABAD
LARKHANA
SHIKARPUR
SUKKUR
KHAIRPUR
HYDERABAD
DUMARKOT
MIRPUR KHAS
NAWABSHAH
KOTRI
Sehwan
Dadu
Jhudo
Tando Muhammad Khan
Tando Allahyar
Mirpur Bathoro
Tando Adam
Umarkot
Chachro
Diplo
Nagar Parkar
Virawah
Mithi
Islamkot
Kunri
Deesa
PALANPUR
RADHANPUR
SANTALPUR
SAN
CUTCH
Lakpat
Nalpur
BHUJ
Jakhau
Mandvi
Mundra
Anjar
Adesar
Mandvi
Wadhwan
DHRANGADHRA
HALVAD
GONDAL
GUJARAT
Viramgam
Dholka
Barwala
Dholera
Gogha
Bhavnagar
Sihor
Talaja
Mahuva
Kodinar
Una
Diu
NAVANAGAR
JUNAGADH
Dwarka
Okhamandal
Porbandar
Mangrol
Veraval
Kodinar
Jafrabad
Rajula
Mahuva
Talaja
Gogha
Bhavnagar
Sihor
Botad
Dhandhuka
Dholera
Viramgam
Mahmudabad
Kheda
Nadiad
Mehmedabad
Matar
Kapadvanj
Thasra
Balasinor
Lunawada
Godhra
Jhalod
Limkheda
Dahod
Devgad Baria
Chhota Udepur
Kawant
Jambughoda
Pavagadh
Champaner
Halol
Kalol
Dabhoi
Baroda
Sankheda
Rajpipla
Nandod
Dediapada
Sagbara
Ankleshwar
Jhagadia
Broach
Jambusar
Amod
Hansot
Vedchhi
Olpad
Kamrej
Surat
Chorasi
Bardoli
Mandvi
Vyara
Songadh
Nizampur
Valod
Vajpur
Navsari
Gandevi
Bansda
Dharampur
Pardi
Umbergaon
Daman
Silvassa
Dadra
Nagar Haveli
Vapi
Basseen
Thana
Kalyan
Murbad
Bombay
Alibag
Panvel
Uran
Janjira
Mahad
Roha
Pen
Khopoli
Karjat
Khalapur
Sudhagad
Poona
Junnar
Ambegaon
Khed
Chakan
Talegaon
Maval
Mulshi
Haveli
Bhor
Velhe
Purandhar
Baramati
Indapur
Daund
Shirur
Ahmednagar
Akola
Sangamner
Kopargaon
Rahuri
Shevgaon
Pathardi
Nevasa
Shrigonda
Karjat
Jamkhed
Ashti
Patoda
Parner
Sangola
Malsiras
Phaltan
Satara
Wai
Mahabaleshwar
Jaoli
Patan
Karad
Koregaon
Khatav
Man
Khanapur
Tasgaon
Miraj
Walwa
Shirala
Kagal
Gargoti
Bhudargad
Ajra
Chandgad
Ramdurg
Gokak
Athni
Chikodi
Hukeri
Nipani
Belgaum
Khanapur
Sampgaon
Parasgad
Rajapur
Vengurla
Malvan
Devgad
Ratnagiri
Sangameshwar
Chiplun
Khed
Dapoli
Mahad
Roha
Pen
Alibag
Panvel
Uran
Janjira
Murud
Shrivardhan
Mhasla
Karwar
Ankola
Sirsi
Yellapur
Supa
Haliyal
Dharwar
Kalghatgi
Hubli
Kundgol
Navalgund
Gadag
Shirhatti
Mundargi
Ron
Nargund
Bagalkot
Badami
Hungund
Jamkhandi
Bilgi
Mudhol
Ramdurg
Gokak
Athni
Chikodi
Hukeri
Nipani
Belgaum
Khanapur
Sampgaon
Parasgad
Rajapur
Vengurla
Malvan
Devgad
Ratnagiri
Sangameshwar
Chiplun
Khed
Dapoli
Mahad
Roha
Pen
Alibag
Panvel
Uran
Janjira
Murud
Shrivardhan
Mhasla
Karwar
Ankola
Sirsi
Yellapur
Supa
Haliyal
Dharwar
Kalghatgi
Hubli
Kundgol
Navalgund
Gadag
Shirhatti
Mundargi
Ron
Nargund
Bagalkot
Badami
Hungund
Jamkhandi
Bilgi
Mudhol
ARABIAN SEA
GULF OF CUTCH
GULF OF CAMBAY